

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

**MEMORANDUM**

**November 17, 2105**

**TO:** Phillip Fielder, P.E., Permits and Engineering Group Manager

**THROUGH:** Phil Martin, P.E., Engineering Manager, Existing Source Permits Section

**THROUGH:** Peer Review

**FROM:** Ellis Fischer, P.E., Existing Source Permits Section

**SUBJECT:** Evaluation of Permit Application No. **2009-394-C (M-3) PSD**  
Modify Existing Processes  
Tinker Air Force Base  
Facility ID: 1518  
Tinker AFB, Oklahoma County

**SECTION I. INTRODUCTION & REQUESTED CHANGES**

Tinker Air Force Base (Tinker AFB) requests an increase in emissions associated with facilities needed to continue existing aircraft maintenance operations. The applicant discovered discrepancies in the stripper materials initially included in Permit No. 2009-394-TVR. This is a relaxation of VOC usage/emission limitation of chemical depainting. Review is conservative based on all depainting sources or buildings being subject to full PSD review. The emission relaxation will only affect the VOC emissions from the chemical depainting operations. The analysis in this permit involves only the chemical depainting VOC emissions. A full PSD review is conducted for each building in which stripping occurs. All other emissions remain the same.

Tinker AFB, located in Oklahoma County, Oklahoma, is an existing major emission source facility (Standard Industrial Classification Code 9711) with permitted emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOCs) exceeding 250 tons per year (TPY) each. Facility-wide operations at Tinker AFB are currently authorized by Permit Number 2009-394-TVR, issued by the Oklahoma Department of Environmental Quality (ODEQ) on September 2, 2010.

During recent reviews of material usage and air emissions, Tinker discovered that a necessary change in the material(s) used for chemical depainting (stripping) activities has had an unexpected significant effect on VOC emissions. Tinker AFB removes coatings from aircraft and aircraft components using both materials that contain hazardous air pollutants (HAPs) and materials that contain zero HAPs. These depainting materials that contain zero HAPs are often referred to as “non-HAP strippers.” The non-HAP stripping chemicals that were used in 2014 and that are projected to be used in future years require higher usage to achieve the same effect as chemicals used prior to 2013, and thus will increase VOC emissions over PSD significant

level and will require PSD review.

### **Retroactive VOC Increase Covered Under This PSD Permit**

TAFB provides depot-level maintenance for various weapon systems in the Air Force inventory. Part of this maintenance operation includes depainting (stripping) of aircraft and aircraft components. This has been an integral part of Tinker's operational support mission provided under task from the Air Force Materiel Command.

Recently, a specific non-HAP stripping chemical that was heavily used at Tinker AFB has become unavailable for purchase by the Air Force, and therefore unavailable for use at Tinker AFB. Alternative chemicals putatively having similar characteristics were substituted, and it was expected that this change would have minimal effect on Tinker's annual VOC emissions. Operational experience with the substitute chemicals has, however, revealed that a much larger volume of the alternative material is required in order to achieve the necessary coating removal from aircraft and aircraft components. This creates a commensurate increase in VOC emissions. HAP emissions are unaffected by this change, because the chemicals in question contain zero HAPs.

## **SECTION II. FACILITY DESCRIPTION**

Tinker AFB is located on the southeastern edge of the Oklahoma City metropolitan area and adjacent to Midwest City and Del City. The Base encompasses approximately 4,885 acres of slightly rolling terrain and the Air Force leases approximately 430 acres from Oklahoma County. There are two active runways for aircraft operations and numerous support activities for maintaining facilities, aircraft, and motor vehicles. As a small community, the Base has personnel support activities that include housing, eating, shopping, recreation, and a medical clinic.

Tinker AFB is a multi-mission/multi-faceted installation that serves the U.S. Air Force, U.S. Navy, and other Department of Defense (DoD) organizations. The primary Standard Industrial Classification (SIC) code is 9711, National Security. It is home to the Oklahoma City Air Logistics Center (OC-ALC) and a number of associated organizations, including the U.S. Navy E-6 Strategic Communications Wing One, the 552nd Air Control Wing, the 507th Air Refueling Wing, the 38th Engineering Installation Wing, the 3rd Combat Communications Group, the Defense Information Systems Agency, the Defense Accounting Office, the Materials Systems Group, the Defense Printing Service Detachment Office, and the Defense Logistics Agency. This inter-servicing results in integration of both U.S. Air Force and U.S. Navy personnel in the security police, hospital, chaplain, and maintenance organizations.

The functions of the associated organizations are as follows.

- The OC-ALC is one of the three depot repair centers in the Air Force Materiel Command (AFMC) and is the largest organization at Tinker AFB. Its extensive area includes 215 acres of ramp space for the U.S Air Force and 19 acres for the U.S.

- Navy. Tinker AFB is tasked with, among other things, managing and repairing fifteen different types of jet engines (over 17,000 total) used by the Air Force. OC-ALC repairs, overhauls, and manufactures a wide variety of aircraft and engine components in support of global defense requirements. Commodity management includes responsibility for over 50,000 different commodity items. Each year over 250,000 components are repaired for return to the field.
- The Air Combat Command (ACC) organizations located at Tinker AFB include the largest associate organization, the 552nd Air Control Wing (552 ACW), and the 3rd Combat Communications Group (3CCG). The 552 ACW operates the E-3 “Sentry” aircraft (AWACs) with unique airborne radar that also provides command and electronic communications worldwide. The 3CCG organizes, trains, and equips personnel in 33 U.S. Air Force specialties to deploy, operate, and sustain communications and air traffic systems in support of military operations under hostile and bare-base conditions.
  - The 507th Air Refueling Wing is Oklahoma’s only flying reserve unit. The wing converted from F-16 fighters to KC-135R refueling aircraft (tankers) in the spring of 1994. The 507th supports the Air Mobility Command (AMC) mission requirements by providing mid-air refueling support to all DoD aircraft and the North Atlantic Treaty Organization (NATO) allies.
  - The 38th Engineering Installation Group (38EIG) is headquartered at Tinker AFB and has a worldwide mission. It is the only wing in the U.S. Air Force that engineers, installs, removes, and relocates command, control, communications, and computer systems.
  - The U.S. Navy Strategic Communications Wing One (STRATCOMMWING ONE) operates the E-6A “Mercury” aircraft to provide a reliable, survivable, and endurable communications link between the National Command Authority and strategic forces. STRATCOMMWING ONE maintains administrative and operational control over the two Take Charge and Move Out (TACAMO) aircraft squadrons.
  - The Defense Accounting Office processes all of Tinker AFB’s accounting records and reports.
  - The Defense Printing Service Detachment Office (Navy operated) handles the majority of the printing needs of the base.
  - The Defense Information System Agency provides real time IT and communications support to the President, Vice President, Secretary of Defense, the military services, and the combatant commands.

### SECTION III. AIR PERMIT HISTORY

Tinker AFB is a “grandfathered” facility having been in continuous operation since 1942. From the inception of environmental regulatory requirements until the issuance of the original Title V permit, Tinker AFB operated under numerous individual permits, issued to accommodate operational modifications as they evolved. Tinker AFB submitted its initial Title V Operating Permit Application on March 4, 1999. ODEQ issued the Title V permit on May 10, 2005. The facility-wide Title V permit consolidated and superseded all outstanding operating permits.

After the original Title V permit was issued, operational changes have required additional construction permits to authorize modifications at Tinker AFB. Once constructed and completed, the modified sources were incorporated in four subsequent Title V permits issued by ODEQ. Significant modifications included installation of three new boilers, large emergency generators, operations of seasonally-leased diesel generators for cooling, and subsuming the former GM (Oklahoma Arcadian Utilities Permit) boiler plant permit. These subsequent Title V permits also removed decommissioned sources such as the classified waste incinerator, the halogenated solvent batch cold cleaning tank, and vacuum degreasers. In addition, some restrictions were added such as limiting the number of combustion units which could simultaneously burn fuel oil as a backup, to support compliance with the Oklahoma ambient air quality standards.

Currently, Tinker AFB operates under the Title V Permit No. 2009-394-TVR and Permit No. 2009-394-C (M-2) PSD. Because Oklahoma has a dual permitting system requiring both construction and operating permit applications for significant changes, the construction permits are needed until the project is completed. Post-construction, the facility submits an operating permit application identifying any changes from the construction permit specific conditions and requests the Title V permit be updated to include the operating permit for the completed project.

#### **SECTION IV. EMISSION SOURCES**

Tinker AFB primarily operates, maintains, and reworks military aircraft. Emissions from aircraft operations both in flight and on the ground are not evaluated in this renewal permit application, because aircraft are considered mobile sources, not subject to the Title V permitting. Also excluded from the Title V permitting are the operations of the associated ground-support equipment (GSE) or aerospace-ground equipment (AGE), mobile sources that support aircraft operations. However, the Title V renewal permit does cover maintenance of aircraft and GSE, specifically the use of solvents, depainting, and surface coating of aircraft and ground-based equipment, because these emissions sources are subject to relevant regulatory requirements, such as the Aerospace and DLSME NESHAPs.

Maintenance and rework activities also include testing of jet engines and inspection and repair of fuel cells, tanks, and other systems. Activities that have the potential to cause significant air pollutant emissions include solvent use, surface coating, and burning of fuel in the engine test cells. Other support activities that may lead to emissions of air pollutants include fuel combustion in boilers, heaters, and emergency generators, and evaporation of volatile compounds from fuel storage and handling.

Of over 1,500 identified sources of air pollutants at Tinker AFB, approximately 500 were identified as significant. These emission units (EUs) have applicable state and/or federal requirements such as emission or usage limits, or monitoring, recordkeeping, reporting, and work practice requirements. The significant emission units were grouped together into EUGs based on similarity of sources and requirements, as described in Table 3.

**Table 3**

<b>Description of Emission Unit Groups</b>		
<b>EUG Number</b>	<b>EUG Name</b>	<b>Description</b>
CD1	ChemDpnt-1	Aerospace depainting – zero Hazardous Air Pollutant (HAP) stripper
CD2	ChemDpnt-2	Aerospace depainting – spot depainting (HAP containing)
CD3	ChemDpnt-3	Aerospace depainting – exempt (radomes and parts)
CD4 (New)	ChemDpnt-4	Non-Aerospace depainting, Subject to DLSME (MeCl)
CF1	ClnFlush-1	Aerospace cleaning – flush
CH1	ClnHWipe-1	Aerospace cleaning – hand wipe
CH2	ClnHWipe-2	Aerospace cleaning – hand wipe, exempt
CR1	Chromium-1	Chromium electroplating
CS1	ClnSpray-1	Aerospace cleaning – spray gun cleaning
CS2 (New)	ClnSpray-2	DLSME cleaning – spray gun cleaning
CT1	Caltest-1	Calibration fluid test stands
EC1	ExtComb-1	Dual Fuel Boilers, > 10 MMBtu/hr and < 100 MMBtu/hr, Not Subject to NSPS
EC2	ExtComb-2	Dual Fuel Boilers, > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed prior to February 28, 2005)
EC3	ExtComb-3	Natural Gas External Combustion > 10 MMBtu/hr, Subject to NSPS Subpart Dc
EC4	ExtComb-4	Dual Fuel Boilers, > 10 MMBtu/hr, Subject to NSPS Subpart Dc
EC5	ExtComb-5	Dual Fuel Boilers, < 10 MMBtu/hr
EC6	ExtComb-6	Natural Gas External Combustion Units Greater Than 5 MMBtu/hr, Not Subject to NSPS, including Units > 10 MMBtu/hr
EC7	ExtComb-7	Dual Fuel Boilers > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed after Feb 28, 2005)
EC8	ExtComb-8	Dual Fuel Boilers > 10 MMBtu/hr and < 100 MMBtu/hr, Subject to NSPS Subpart Dc
EC9	ExtComb-9	Dual-Fuel Boilers, Grandfathered
EC10	ExtComb-10	Dual-Fuel Boilers > 100 MMBtu/hr, not subject to NSPS
ET1 (New)	EngTest-1	Jet Turbine Engine Testing
HL1	Halog-1	Halogenated solvent batch cold cleaning
IC1	IntComb-1	Compression Ignition ICE < 500-bhp, non-emergency
IC2	IntComb-2	Stationary RICE, emergency power
IC3	IntComb-3	Compression Ignition ICE > 500-bhp, non-emergency
ND1	NCDepnt-1	Non-chemical Depainting
SC1	SrfCoat-1	Aerospace surface coating, with dry filters
SC2	SrfCoat-2	Aerospace surface coating, brush or spray touch up
SC3	SrfCoat-3	Surface Coating, Aerospace Specialty Coatings
SC4	SrfCoat-4	Non-aerospace surface coating
SC5 (New)	SrfCoat-5	Non-aerospace surface coating, subject to DLSME
SV1	Solvent-1	Cold cleaning, non-aerospace
SV2	Solvent-2	Solvent usage, spray gun pattern testing
SV3 (New)	Solvent-3	Substrate Cleaning, DLSME
TK1	Tank-1	Tanks subject to NSPS Subpart Kb, MOGAS
TK2	Tank-2	Tanks subject only to Oklahoma Air Pollution Control Rules
VD1	VaporDeg-1	Vapor degreasers, conventional
VD2	VaporDeg-2	Vapor degreasers, vacuum

The following descriptions provide a brief overview of the emission sources and operations in each EUG, and discuss regulatory applicability under various federal and state requirements.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting, requirements applicable to each EUG are presented in the specific conditions of the Permit. In addition, emissions limits established for significant emission units are presented in Table 1 of the Permit. The referenced appendix for each EUG lists the emissions units (EUs) in the EUG, and provides the following information for each EU: the EU number, a brief description of the source, the building, the current location, shop name and/or organization, and the effective date.

*The processes or operations affected by the material change are as follows.*

<b>CD1, ChemDpnt-1, Aerospace Depainting – Zero HAP Stripper</b>	
Increased usage of zero HAP stripper	199.6 TPY VOC
<b>CD3, ChemDpnt-3, Aerospace Depainting – Exempt (Radomes and Parts)</b>	
Increased usage of zero HAP stripper	75.4 TPY VOC

### **CD1, ChemDpnt-1, Aerospace Depainting – Zero HAP Stripper**

This EUG represents numerous EUs that are located throughout the facility. These EUs are engaged in depainting operations for aerospace components using zero HAP strippers, and result in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

The VOC emission limit presented in Table 1 of the Permit specific conditions is applicable to the aggregate of all emissions from chemical depainting units operating under CD1, CD2, and CD3, on a facility-wide basis. This aggregate emission limit is based on combining previously issued permit limits (if established), actual historical emission levels scaled up to accommodate a 50% fluctuation in workload for those units not previously permitted, and allowing for additional sources to be commissioned during the duration of the Permit (subject to limitations outlined in Section A of the Permit). Appendix B lists the ChemDpnt-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

### **CD2, ChemDpnt-2, Aerospace Depainting – Spot Depainting (HAP-Containing)**

This EUG represents numerous EUs that are located throughout the facility. These EUs are engaged in spot depainting operations for aerospace components, using HAP-containing strippers, and resulting in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CD1, the VOC emission limit presented in Table 1 of the Permit is applicable to the aggregate of all emissions from chemical depainting units operating under CD1, CD2, and CD3, on a facility-wide basis.

Appendix B lists the ChemDpnt-2 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

### **CD3, ChemDpnt-3, Aerospace Depainting – Exempt (Radomes and Parts)**

This EUG represents numerous EUs that are located throughout the facility. These EUs are

engaged in depainting operations for exempt aerospace components, such as radomes and parts, and result in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CD1, the VOC emission limit presented in Table 1 of the Permit specific conditions is applicable to the aggregate of all emissions from chemical depainting units operating under CD1, CD2, and CD3, on a facility-wide basis. Appendix B lists the ChemDpnt-3 emission units, and the alternative operating scenarios, if applicable will be included in the EUG specific conditions.

#### **CD4, ChemDpnt-4, Non-Aerospace Depainting Subject to the DLSME**

This EUG covers chemical depainting of non-aerospace equipment, specifically depainting operations that use methylene chloride or a mixture containing methylene chloride. The regulation does not apply to depainting operations that meet the applicability criteria of Subpart GG or JJ. The regulation specifies a limit of 1,000 pounds of organic HAPs per calendar year, except for emissions from vats or dip tanks greater than 13 square feet of air/chemical interface. The rule includes calculation methods and work practice standards. For vats or dip tanks having an air/chemical interface greater than 13 square feet, emissions must be minimized by implementing additional controls and work practice standards under the proposed DLSME NESHA as contained in the draft rule that EPA submitted to OMB. This EUG has been created as a placeholder in the event Tinker AFB installs units subject to this rule. There are no emission units currently in this ChemDepnt-4.

#### **CF1, ClnFlush-1, Aerospace Cleaning – Flush**

This EUG represents numerous emission units that are located throughout the facility. The EUs clean aerospace components through flush operations using various solvents, resulting in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c). Appendix B lists the ClnFlush-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

The VOC emission limit presented in Table 1 of the Permit specific conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Because these activities have historically not been subject to permitting limitations, this aggregate emission limit is based entirely on actual recent emission levels scaled up to accommodate a 50% fluctuation in workload and resultant emissions. This emission limit does not represent an increase in emissions compared to the current Title V permit.

#### **CH1, ClnHWipe-1, Aerospace Cleaning – Hand Wipe**

This EUG represents numerous emission units that are located throughout the facility. The EUs are primarily engaged in cleaning aerospace components through hand-wipe operations utilizing rags and cleaning solutions, and results in evaporative losses of volatile organic compounds.

This EUG contains the operations using solvents meeting the composition requirements for approved cleaning solvents (see 40 CFR 63, Subpart GG) or operations using solvents with a composite vapor pressure of 45 mmHg or less. Operations comply with 40 CFR 63.744(b). This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit specific conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the ClnHWipe-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

### **CH2, ClnHWipe-2, Aerospace Cleaning – Hand Wipe, Exempt**

This EUG represents numerous EUs that are located throughout the facility. The EUs are primarily engaged in cleaning components through hand-wipe operations utilizing rags and cleaning solutions, and results in evaporative losses of volatile organic compounds. These EUs are expressly exempt from the standards contained within the Aerospace NESHAP. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit specific conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the ClnHWipe-2 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

### **CR1, Chromium-1, Chromium Electroplating**

This EUG represents emission unit number 4416, in Building 3001, Plating Shop. This EU includes a series of electroplating and rinse tanks that are used in chromium electroplating of metal aerospace components. Emissions from the process tanks are exhausted through packed-bed scrubbers/composite mesh pads (PBS/CMP).

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Furthermore, because the units in this EUG are subject to a technology-based standard or emission rate limit, no applicable PTE limit has been established. Appendix B lists the Chromium-1 emission unit.

### **CS1, ClnSpray-1, Aerospace Cleaning – Spray Gun Cleaning**

This EUG represents numerous EUs that are located throughout the facility. These EUs are for clean spray gun equipment that is used for aerospace applications using solvents, resulting in evaporative losses of volatile organic compounds.

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of



the Permit specific conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the ClnSpray-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

### **CS2, ClnSpray-2, DLSME Spray Gun Cleaning**

This EUG represents several EUs that are located throughout the facility that will become subject to the DLSME NESHAP when finalized. The EUs are for clean spray gun equipment that is used for DLSME (non-aerospace) applications.

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit specific conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the ClnSpray-2 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

### **CT1, CalTest-1, Calibration Fluid Test Stands**

This EUG contains the fuel system components testing operations that use calibration fluid in numerous aircraft fuel system component test stations, also called test stands. Evaporative emissions of VOC occur during change out and flushing of the unit under test. In Building 3902 (EU 5415), all ventilation and process purge air supplied to equipment, rooms, and areas where calibration fluid may be present, is exhausted to the atmosphere through two exhaust plenums, which are 45 feet above ground level. In Building 3108 (EU 5015), the ventilation and process purge air is exhausted either through roof mounted vents or one of the plenums erected approximately 15 feet above the roof line (~ 40 feet above the ground). Building 3907 (EU 5417) is being constructed to accommodate equipment to be relocated from 3108. Not all equipment will be relocated. Building 3907 will also accommodate some shops supporting the fuel component testing operation. When the transfer to the new facility is completed, the emissions limits for the relocated operation will comply with the reduced emissions limits in the construction permit.

Emission limits are provided for EUs 5415, 5015, and 5417 in Table 1 of the Permit specific conditions, and represent the emission limits previously established under PSD permitting. Advance approval has been granted for additional test stations to be added in buildings 3902, 3108, and 3907 during the term of this permit. Fuel component testing in Building 3108 will cease when the transition to 3907 is complete. At that time, the permitted limits associated with Building 3108 will become null and void. In addition, to accommodate fluctuations in workload and promote flexibility, the permittee may replace existing test stations within each existing source with new or modified stands, as long as the resulting emissions do not exceed the limits established for each EU in Table 1 of the Title V Operating Permit. Although equipment may be added, the emissions are limited to the already permitted levels. Appendix B lists the CalTest-1 emission units.

**EC1, ExtComb-1, Dual-Fuel Boilers, > 10 MMBtu/hr and < 100 MMBtu/hr, Not Subject to NSPS**

This EUG contains three boilers with identical applicable requirements, which are based on similar heat input ratings and installation dates. They are fired primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each operating scenario for this EUG are in the specific conditions of the Permit.

The emission limits in Table 1 of the Permit apply to the listed EUs in EC1, as a plant-wide aggregate to allow for operational flexibility. Appendix A lists the ExtComb-1 emission units.

**EC2, ExtComb-2, Dual-Fuel Boilers, > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed prior to February 28, 2005)**

This EUG contains two boilers with identical applicable requirements, based on similar heat input ratings and installation dates. They are fired primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each operating scenario for this EUG are presented in the Permit.

Emission limits, presented in Table 1 of the Permit, were established separately for each of the boilers in EC2, and are equal to the previously permitted limits. Appendix A lists the ExtComb-2 emission units.

**EC3, ExtComb-3, Natural Gas External Combustion > 10 MMBtu/hr, Subject to NSPS Subpart Dc**

Until December 2006, Tinker AFB operated two 10.5 MMBtu, gas-fired boilers in building 1030. In 2006, Tinker AFB replaced the original burners rated at 10.5 MMBtu with units that have a heat input rating of 4.2 MMBtu. These boilers are no longer subject to New Source Performance Standards Subpart Dc as they are rated at less than the 10 MMBtu threshold for NSPS applicability. Consequently, they have been removed from the Title V Emission Unit Group – EC3 “Natural Gas External Combustion > 10 MMBtu/hr, Subject to NSPS subpart Dc”. The replacement of the burners qualifies the boilers as insignificant sources. Emissions from the boilers are included in the annual air inventory emission report and grouped with other insignificant combustion sources.

Currently, there are no EUs assigned to this EUG and therefore, there is no Appendix for this EUG. This EUG has been retained as a placeholder to accommodate new units, if installed in the future.

**EC4, ExtComb-4, Dual-Fuel Boilers, > 10 MMBtu/hr, Subject to NSPS Subpart Dc**

This EUG contains three boilers with identical applicable requirements, based on similar heat input ratings and installation dates. They are fired primarily on natural gas (primary operating

scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). As of February 2009, EUs 0051 and 0052 have been decommissioned, and new, smaller satellite boilers and heaters have been installed. The steam plant in building 821 is no longer in operation. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each operating scenario for this EUG are presented in the Permit.

Emission limits presented in Table 1 of the Permit were established separately for each of the boilers in EC4, and are equal to the previously permitted limits. Appendix A lists the ExtComb-4 emission units and includes the two decommissioned boilers because they have not been removed from the facility.

#### **EC5, ExtComb-5, Dual-Fuel Boilers < 10 MMBtu/hr**

This EUG contains two boilers with identical applicable requirements, based on similar heat input ratings and installation dates. They are fired primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). As of February 2009, EUs 0053 and 0054 have been decommissioned, and new, smaller satellite boilers and heaters have been installed. The steam plant in building 821 is no longer in operation. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each operating scenario for this EUG are presented in the Permit.

The emission limits in Table 1 of the Permit apply to the listed EUs in EC5, as a plant-wide aggregate to allow for operational flexibility. Appendix A lists the ExtComb-5 emission units, the two decommissioned boilers, because they have not been removed from the facility.

#### **EC6, ExtComb-6, Natural Gas External Combustion Units > 5 MMBtu/hr, Not Subject to NSPS**

This EUG contains two boilers and two process heaters with identical applicable requirements, based on similar heat input ratings. They are fired on natural gas. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. Emission limits have been established for the boilers, and are presented in Table 1 of the Permit. Plant-wide emission limits were established for the aggregate of the two boilers. The process heaters have not been subject to emission limits because they have not previously been issued permits and are not subject to NSPS (see next paragraphs). They are subject to certain OAC emission standards.

The process heaters were replacement units for similar size process heaters which were grandfathered; i.e., they were installed prior to any effective regulatory requirements. Both the old and replacement units were natural gas-fired units rated at 14 MMBtu/hr each. Therefore, the replacement of like units did not result in an emission increase for any criteria pollutant greater than 1 lb/hr, the permitting threshold for replacement units in the 1980s (OAC rules). Therefore, no permit was issued and no limits were assigned.

NSPS Subpart Dc applies to boilers/process heaters rated between 10 and 100 MMBtu/hr, but only units installed/constructed after June 9, 1989 are subject to this regulation.

Under Title V, combustion units rated greater than 5 MMBtu/hr are considered significant sources. The furnaces are considered significant air emission units, but have not had limits imposed due to their status as like-kind replacements for grandfathered units. Appendix A lists the ExtComb-6 emission units.

**EC7, ExtComb-7, Dual-Fuel Boilers > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed after February 28, 2005)**

This EUG contains one boiler installed in 2006 in building 3001. This boiler replaced the previously grandfathered emission unit EU 0063. This new unit is a 121 MMBtu/hr boiler primarily fired on natural gas (primary operating scenario) with the capability of burning No. 2 fuel oil (alternative operating scenario). This EU is an affected unit under NSPS Subpart Db. Emission limits were established in Permit No. 99-104-C (M-7) and have been incorporated in the specific conditions of the current Title V permit.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Operating permit emission limits have been established and compliance confirmed with the performance and RATA tests. Appendix A lists the ExtComb-7 emission unit.

**EC8, ExtComb-8, Boilers >10 MMBtu/hr & <100 MMBtu/hr, Subject to NSPS Subpart Dc**

This EUG contains two boilers with identical applicable requirements, based on similar heat input ratings. These new EUs are each 14.3 MMBtu/hr, primarily fired on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario).

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Emission limits are listed in Table 1 of the Permit. Appendix A lists the ExtComb-8 emission units.

**EC9, ExtComb-9, Dual-Fuel Boilers, Grandfathered**

This EUG represents the dual-fuel external combustion units that are grandfathered from permitting requirements. This EUG contains six boilers that are fueled primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). Appendix A lists the ExtComb-9 emission units.

**EC10, ExtComb-10, Dual-Fuel Boilers (> 100 MMBtu/hr) not subject to NSPS**

This EUG includes the external combustion units contained in the subsumed permit for the General Motors Assembly Plant. This EUG contains three boilers at the Tinker Aerospace Complex. Two units (EUs 0091 and 0092) are fired only on natural gas; EU 0093 burns both natural gas and landfill gas. The boiler normally operates while burning a mixture of both fuels.

Appendix A lists the ExtComb-10 emission units.

### **HL1, Halog-1, Halogenated Solvent Batch Cold Cleaning**

This EUG originally represented emission unit number 4428, a halogenated solvent batch-cleaning machine. EU 4428 no longer uses a halogenated solvent. Tinker AFB would like to retain this EUG as a placeholder, in the event that a halogenated solvent tank is needed in the future. The emission limit formerly applicable to EU 4428 has been removed from Table 1 of the Permit. There are no emission units assigned to this EUG currently.

### **IC1, IntComb-1, Compression Ignition Internal Combustion Engines < 500-bhp, Non-Emergency**

This EUG represents numerous EUs potentially affected by NSPS Subpart IIII and/or NESHAP ZZZZ. Currently, this EUG contains generators with identical applicable requirements, under EU number 5289, used at various locations on base. These diesel-fueled internal combustion engines have been used on a temporary basis since 2001, primarily during the summer months to supply power for chillers. Tinker AFB is unable to supply sufficient power to several buildings such as 2101, 2121 and 2211, and uses these units as needed during the summer months. This is a general EUG not limited by the number of units employed, but rather must comply with emission limits established by Permit No. 2002-484-C, and retained in the Title V Operating Permit. The horsepower size may vary because these units are leased for seasonal use. Specific Conditions of the Permit require periodic testing to verify vendor emissions data and emission calculations to demonstrate compliance with permitted limits.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. In addition, emission limits have been established for these units as a plant-wide aggregate, and are presented in Table 1 of the Permit. Appendix A provides some details on the emission units for this EUG.

The non-road engines do not meet the definition of a stationary internal combustion engine in either 40 CFR 60 Subpart IIII §60.4219 or 40 CFR 63 Subpart ZZZZ §63.6585(a); therefore, they are exempted from these federal regulations.

NOTE: The permit conditions for this EUG also contain specific conditions that will apply if engines not qualifying as non-road engines are installed.

### **IC2, IntComb-2, Stationary Reciprocating Internal Combustion Engines (RICE) Constructed After December 19, 2002, Used for Emergency Power**

This EUG includes all stationary RICE Tinker AFB proposes to install to provide emergency power. Tinker AFB has requested and been granted advance approval for inclusion of these engines in the Title V Operating Permit. Emission limits have not been established for these EUs, because of their emergency status and limited hours of operation. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Appendix A lists the IntComb-2 emission units.

**IC3, IntComb-3, Compression Ignition Internal Combustion Engines > 500-bhp, Non-Emergency**

This EUG represents numerous EUs potentially affected by NSPS Subpart IIII and/or NESHAP ZZZZ. Limits and conditions were incorporated from Permit No. 99-104-O (M-3). Currently, these diesel-fueled internal combustion engines have been used on a temporary basis, primarily during the summer months to supply sufficient power for chillers since 2001. Tinker AFB is unable to supply sufficient power to several buildings and utilizes these units as needed during the summer months. Although the specific number of units may vary, depending on operational requirements, all units >500-bhp will have identical requirements and will be subject to an aggregate emission limit for this EUG.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. In addition, emission limits have been established for these units as a plant-wide aggregate, and are presented in Table 1 of the Permit. Appendix A provides some details on the emission units for this EUG.

These non-road engines do not meet the definition of a stationary internal combustion engine in either in 40 CFR 60 Subpart IIII §60.4219 or 40 CFR 63 Subpart ZZZZ §63.6585(a); therefore, they are exempted from these federal regulations.

NOTE: The permit conditions for this EUG also contain specific conditions that will apply if engines not qualifying as non-road engines are installed.

**ET1, EngTest-1, Jet Turbine Engine Testing**

This EUG represents all jet turbine engine testing operations at Tinker AFB. Previously grandfathered sources included test operations in buildings 3703 and 3234, EUs 4403 and 4404, respectively. Although construction has not been completed, this renewal permit application incorporates the requirements from construction permit number 99-104-C M-4, which authorizes updating of facility infrastructure, testing software/hardware, and installation of additional test facilities. This permit establishes aggregate emissions limits for all current and authorized future test operations for jet turbine engines. The emissions limits have been added to Table 1 of the Permit and specific conditions have been incorporated under the EUG section of the permit.

Due to weapon system replacement and DoD allocation of workload, additional test facilities are needed to accommodate workload changes and newer weapon systems. Programmed projects are planned for T-9s, and one permanent test cell is projected for FY10 and FY12, respectively, pending funding. Tinker AFB shall notify the ODEQ prior to beginning construction with details including location, emission unit number, and unit description. Any increase in emissions above the permitted limits in Table 1 of the permit shall be evaluated for potential permitting requirements. Appendix B lists the EngTest-1 emission units.

**ND1, NCDpnt-1, Non-chemical Depainting**

This EUG represents numerous EUs that are located throughout the facility. The EUs are engaged in non-chemical depainting of the outer surfaces of completed aerospace vehicles, including the fuselage, wings, and vertical and horizontal stabilizers of aircraft, and the outer casing and stabilizers of missiles and rockets. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c). Detailed discussions regarding applicable standards, and monitoring, recordkeeping and reporting requirements are presented in the Permit. For nonchemical depainting operations, a PM emission limit has been established (see Table 1 of the Permit), applicable to the aggregate of all emissions from units operating under ND1. Appendix B lists the NCDpnt-1 emission units.

**SC1, SrfCoat-1, Aerospace Surface Coating, with Dry Filters**

This EUG represents numerous EUs that are located throughout the facility. The EUs are primarily engaged in surface coating (primer and topcoat) of aerospace vehicles or components, resulting in evaporative losses of volatile organic compounds, and emissions of particulate matter, if spray guns are utilized. A reasonably expected alternate operating scenario for painting of non-aerospace vehicles or components, has been established for these EUs. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. It should be noted that the facility has been operating in compliance with the Aerospace NESHAP regulations since 1998. Emission limits for surface coating operations (see Table 1 of the Permit), are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, SC5, and SV2 on a facility-wide basis. This aggregate emission limit is based on a combination of previously issued permit limits and actual historical emission levels, scaled up to accommodate a 50% fluctuation in workload for those units not previously permitted.

In addition, these EUs may be required to accommodate some coating operations, such as brush and touch-up on exempt aerospace components, which would be exempt from part or all of the Aerospace NESHAP requirements (as presented in the specific conditions for this EUG). The requirements governing the brush and touch-up activities would be those presented for the EUG SrfCoat-2, and the requirements governing the aerospace exempt activities would be those presented for the EUG SrfCoat-3 in this facility permit. Appendix B lists the SrfCoat-1 emission units, and alternative operating scenarios, will be included in the EUG specific conditions.

**SC2, SrfCoat-2, Aerospace Surface Coating, Brush or Spray Touch-Up**

This EUG represents numerous EUs that are located throughout the facility. The EUs are primarily engaged in surface coating operations (primer and topcoat) of aerospace vehicles or components, using brush or touch-up techniques, resulting in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c). A reasonably expected alternate operating scenario, for painting of non-aerospace vehicles or components, has been established for these EUs. These EUs include activities listed in 40 CFR 63.745(g)(4) as coating activities exempt from control

requirements, including but not limited to painting activities where it is not technically feasible to paint in a booth. The ODEQ has approved SC2 operations in maintenance areas where it is not technically feasible to paint in a booth.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to units operated under this EUG are presented in the Permit. For surface coating operations, VOC and PM emission limits are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, SC-5, and SV2 on a facility-wide basis.

In addition, these EUs may be required to accommodate some coating operations, such as those performed on exempt aerospace components, which would be exempt from part or all of the Aerospace NESHAP requirements presented as standard conditions for this EUG. The requirements governing the aerospace exempt activities would be those presented for the EUG SrfCoat-3 in this facility permit. Appendix B lists the SrfCoat-2 emission units, and the applicable alternative operating scenarios, are included in the EUG specific conditions.

### **SC3, SrfCoat-3, Surface Coating, Aerospace Specialty Coatings**

This EUG represents surface coating EUs that are located throughout the facility. The EUs are engaged in surface coating of aerospace components using specialty coatings (as defined in Appendix A of Subpart GG). Subpart GG states, “This subpart does not contain control requirements for the use of specialty coatings ...” These coating operations are subject to the Oklahoma rules, including the limits established for specialty coatings in Subchapter 39, Appendix N. These activities result in evaporative losses of volatile organic compounds and emissions of particulate matter, if spray guns are utilized. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to units operated under this EUG are presented in the Permit. The surface coating emission limits in Table 1 of the Permit are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, SC5, and SV2 on a facility-wide basis. Appendix B lists the SrfCoat-3 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

### **SC4, SrfCoat-4, Non-Aerospace Surface Coating**

This EUG represents surface coating EUs that are engaged in surface coating operations for non-aerospace vehicles and equipment, such as ground support equipment and automobiles. These activities result in evaporative losses of volatile organic compounds and emissions of particulate matter if spray guns are utilized. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to units operated under this EUG are presented in the Permit. The surface coating emission limits in Table 1 of the Permit are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, SC5, and SV2 on a facility-wide basis. Appendix B lists the SrfCoat-4 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions. When the final DLSME NESHAP is promulgated, some of the paint booths in this EUG will be transferred to EUG SC5, which will address the new requirements.



**SC5, SrfCoat-5, Non-Aerospace Surface Coating (Subject to DLSME MACT)**

This EUG covers surface coating for maintenance of ground-based military and civilian vehicles and equipment, including aircraft ground equipment (AGE) and ground support equipment (GSE), under the proposed DLSME NESHAP. The standard also includes work practice standards. Requirements under this EUG have standards that include: (1) certification of painters and shop personnel that spray apply refinish coatings, (2) spray application booths with filtration standards or preparation stations with specific filters, (3) coating application with high-volume, low-pressure spray guns, (4) spray gun cleaning requirements, and (5) training and documentation of training for the painters.

There are presently no units in this EUG. When the EPA finalizes the DLSME, some of the current SC4 paint booths will be transferred to this EUG. The surface coating emission limits in Table 1 of the Permit are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, SC5 and SV2 on a facility-wide basis. Alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

**SV1, Solvent-1, Cold Cleaning, Non-aerospace**

This EUG represents numerous emission units that are cold cleaning tanks containing solvents. Operation of these tanks results in evaporative losses of volatile organic compounds.

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the Solvent-1 emission units, and specifies the alternative operating scenarios under which these EUs may operate.

**SV2, Solvent-2, Solvent Usage, Spray Gun Pattern Testing**

This EUG represents two EUs that perform a spray gun pattern testing activity using a solvent. These units were installed prior to 1994, and result in evaporative losses of volatile organic compounds.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to these emission units are presented in the Permit. The VOC emission limit in Table 1 of the Permit is applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, SC5, and SV2 on a facility-wide basis. Appendix B lists the Solvent-2 emission units.

**SV3, Solvent-3, Substrate Cleaning, DLSME**

This EUG represents numerous EUs that are associated with solvent cleaning operations for maintenance of mobile equipment and motor vehicles that are not subject to the Aerospace NESHAP (non-aerospace vehicles and equipment). Substrate cleaning means the use of liquid

materials to remove contaminants and other materials, such as dirt, grease and oil from a substrate before or after application of a coating, the removal of sealants or adhesives or residue thereof, and the removal of identification markings. These operations would primarily be conducted on aircraft ground support equipment and motor vehicles, before or after application of a coating. The rule specifies the use of non-HAP solvents unless a standardization document such as a technical order requires the use of a specific product that contains HAPs. The EUs are primarily engaged in hand-wipe operations utilizing rags and cleaning solutions, but may include flush or tank cleaning. This EUG was created as placeholder until the final DLSME NESHAP is promulgated. Currently, there are no EUs assigned to this EUG and therefore, there is no Appendix for this EUG. Some of the current EUs will be reassigned to this EUG when the rule is finalized. As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis.

#### **TK1, Tank-1, Tanks Subject to NSPS Subpart Kb, MOGAS**

This EUG includes one above ground storage tank, equipped with an internal floating roof, which stores motor gasoline (MOGAS). Due to its size, content, and/or installation date, this tank is subject to NSPS, 40 CFR 60, Subpart Kb. The activities associated with filling and emptying this tank, along with the diurnal heating and cooling cycles, result in evaporative losses of VOCs. Emission limits have been established for this EU in Table 1 of the Permit. Appendix B lists the Tank-1 emission unit.

#### **TK2, Tank-2, Tanks Subject Only to Oklahoma Air Pollution Control Rules**

This EUG represents tanks considered significant because they are subject to the submerged fill requirements of OAC 252:100-37-15(b). These tanks are not subject to NSPS, 40 CFR 60. The activities associated with filling and emptying these tanks, along with the diurnal heating and cooling cycles, result in evaporative losses of volatile organic compounds.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. The units in this EUG are subject to only to the submerged fill requirement. No emissions limits are applicable to these tanks. Appendix B lists of the Tank-2 emission units.

#### **VD1, VaporDeg-1, Vapor Degreasers, Conventional**

This EUG includes a conventional vapor degreaser that uses perchloroethylene. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. Furthermore, because the unit in this EUG is subject to a technology-based standard, no applicable emission limit has been established. Tinker AFB tested and demonstrated compliance with the idling emission standard in May 1998. The NESHAP does not limit emissions from this unit. Appendix B lists the VaporDeg-1 emission unit.

**VD2, VaporDeg-2, Vapor Degreasers, Vacuum**

This EUG includes three vacuum vapor degreasers that previously used perchloroethylene. All vacuum vapor degreasers have been either removed or permanently decommissioned. Only EU 4202 remains on-site until removal can be accomplished. The specific conditions have been updated to reflect that no units are currently operated, however Tinker AFB requests that the EUG be retained in the event a vacuum degreaser is installed in the future. There is no Appendix for this EUG.

**SECTION V. INSIGNIFICANT ACTIVITIES**

The U.S. EPA issued a memorandum signed by Dr. John Seitz, Office of Air Quality Planning and Standards (OAQPS), dated August 2, 1996, which applies to major source determinations for military installations. Such activities have been identified and included in the listing of Insignificant Activities pursuant to Oklahoma Administrative Code (OAC) 252:100-8. The second paragraph of the memorandum on page 18 states:

“Military installations include numerous activities that are not normally found at other types of sources. These types of activities include residential housing, schools, day care centers, churches, recreational parks, theaters, shopping centers, grocery stores, gas stations, and dry cleaners. These activities are located on military installations for the convenience of military personnel (both active duty and retired), their dependents, and DoD civilian employees working on the base, and they often do not represent essential activities related to the primary military activity(ies) of the base. Therefore, the U.S. EPA believes these types of activities may appropriately be considered not to be support facilities to the primary military activities of a base. As such, these activities may be treated as separate sources for all purposes for which an industrial grouping distinction is allowed. Such activities should be separately evaluated for common control, SIC Code, and support facility linkages to determine if a major source is present. This approach is limited to activities that are provided solely as amenities for active duty and retired personnel, their dependents, and DoD civilian employees on an individual transaction, pay-for-service basis; in lieu of a housing allowance; for religious or recreational purposes; or for the education or care of dependent children.”

**Insignificant and Trivial Activities**

Tinker AFB operates a myriad of insignificant/trivial sources varying from small hydrocarbon storage tanks and chemical cleaning/processing tanks to small welding and self-contained abrasive cleaning operations. Most of these operations have been conducted since air depot maintenance and repair operations began. A list of insignificant sources contained in the Base's air inventory management system and a database of active air emissions sources is maintained on site.

Table 4 summarizes insignificant or trivial activities, which are listed in Appendix I or Appendix

J, respectively, of OAC 252:100-8. Table 1 also lists the justification and any monitoring required to verify the status.

**Table 1**

<b>Insignificant and Trivial Activities</b>				
<b>ID</b>	<b>Description</b>	<b>Justification</b>	<b>Action</b>	<b>Location</b>
0500	Natural gas-burning boilers, space heaters, furnaces, expensor torches, foundry/process ovens, ranges/deep fat fryers, less than or equal to 5 MMBtu/hr heat input	Per ODEQ Appendix I, combustion sources with less than or equal to 5 MMBtu/hr heat input are considered insignificant.	Maintain fuel usage records for insignificant natural gas fuel sources and calculate emissions for the AEI.	Various base-wide locations
0501	Ovens, steam or electric, emissions accounted for elsewhere	Per ODEQ Appendix J, electric or steam-heated drying ovens and autoclaves are considered trivial.	No further action is needed.	Various base-wide locations
0502	Storage tanks, less than 400 gallon capacity	Per ODEQ Appendix I, storage tanks not subject to NSPS and standards in OAC 252:100-37-15, 252:100-39-30, and 252:100-39-41 are considered insignificant.	Maintain records on number and capacity of units.	Various (~25 total)
0503	General adhesive/sealant use	Per ODEQ Appendix I, activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~110 total)
0504	Grinding and sanding operations for aircraft rework, located basewide	Per ODEQ Appendix I, activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	Maintain operation records to verify insignificance.	Various (~80 area sources total)
0505	Welding operations for aircraft rework, basewide	Per ODEQ Appendix I, welding operations utilizing less than 100 pounds of solder and 53 tpy of electrodes are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~20 area sources total)
0506	Soldering operations for aircraft rework, basewide	Per ODEQ Appendix I, soldering operations uses less than 100 pounds of solder and 53 tpy of electrodes are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~35 area sources total)
0507	Hazardous material/ hazardous waste temporary storage sites, hazardous waste accumulation points	Per ODEQ Appendix I, hazardous waste and hazardous materials drum staging areas are considered insignificant.	Maintain records on number of sources.	Various (~750 total)
0508	Storage tanks, 500-15,000 gallon capacity, used to temporarily store hazardous waste/spent hazardous material/fuel prior to offsite disposal	Per ODEQ Appendix I, storage tanks at gasoline and aircraft fuel handling facilities are considered insignificant, except those subject to NSPS and standards in OAC 252:100-37-15, -39-30 and -39-41.	Maintain records on number of units.	Various (~15 total)
0509	Curing of resins	Per ODEQ Appendix J, processes used for the curing of fiberglass or paint products are considered trivial.	No further action is needed.	Various (~20 total)
0510	Fugitive emissions: defuel operations	Per ODEQ Appendix I, activities having the potential to emit no more	Maintain records of throughput to verify	Ramp

**Table 1**

<b>Insignificant and Trivial Activities</b>				
<b>ID</b>	<b>Description</b>	<b>Justification</b>	<b>Action</b>	<b>Location</b>
		than 5 tpy (actual) of any criteria pollutant are considered insignificant.	insignificance.	
0511	Fuel dispensing operations	Per ODEQ Appendix I, emissions from fuel dispensing equipment operated solely for facility-owned vehicles are considered insignificant if fuel throughput is not more than 2,175 gal/day, averaged over a 30-day period.	Maintain records of throughput to verify insignificance.	Various (~20 total)
0512	Storage tanks associated with auxiliary emergency use generators	Per ODEQ Appendix I, storage tanks at gasoline and aircraft fuel handling facilities are considered insignificant, except those subject to NSPS and standards in OAC 252:100-37-15, 232:100-39-30 and 252:100-39-41.	No further action is needed.	Various (~90 total)
0513	Storage tanks (Note that most storage tanks have been previously justified as insignificant in 1997 AEI turnaround documents submitted March 1998)	Per ODEQ Appendix I, storage tanks at gasoline and aircraft fuel handling facilities are considered insignificant, except those subject to NSPS and standards in OAC 252:100-37-15, 232:100-39-30 and 252:100-39-41.	No further action is needed.	Various (~50 total)
0514	General solvent use for facility/equipment maintenance, warehousing, Vo-Tech, and Hobby Shop activities, not subject to Aerospace MACT	Per ODEQ Appendix J, maintenance activities including those not altering the capacity of process, combustion or control equipment, and which do not increase regulated pollutant emissions are considered trivial unless subject to NESHAP or NSPS.	No further action is needed.	Various (~25 total)
0515	Emergency use generators or fire pump engines	Stationary reciprocating internal combustion engines (RICE) that are not subject to the RICE MACT or NSPS Subpart IIII are considered insignificant.	Maintain records of rating, date of installation, annual operating hours to verify insignificance.	Various (~75 total)
0516	Woodworking	Woodworking operations not associated with the primary process operation are considered insignificant.	No further action required.	Various
0517	Solvent use, from containers less than 1 liter	Hand wiping and spraying of solvents from containers with less than 1-liter capacity used for spot cleaning and/or degreasing are considered insignificant.	No further action required.	Various (~15 total)
0518	General solvent use, not subject to NESHAPS (non-Aerospace)	Activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~15 total)
0519	Electroplating operations, not	Activities having the potential to	These sources	Various (~5

**Table 1**

<b>Insignificant and Trivial Activities</b>				
<b>ID</b>	<b>Description</b>	<b>Justification</b>	<b>Action</b>	<b>Location</b>
	subject to NESHAPS	emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	demonstrated to be insig. in 1997 AEI. No further action required.	total)
0520	Specialty coating usage, exempt from Aerospace NESHAP	Per ODEQ Appendix I, surface coating operations that do not exceed 60 gals/month of coatings, thinners, and clean-up solvents are considered insignificant. Furthermore, these operations must not be subject to any federal (Aerospace NESHAP) or state (must be under 100 lb/day of VOC emissions) applicable requirements to be considered insignificant.	Maintain records of usage to verify insignificance.	Various
0521	Stripper usage, non-HAP containing, not subject to Aerospace NESHAP	Activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant, provided that there are no other state or federal applicable requirements.	Maintain records of usage to verify insignificance.	Various
0522	Diesel Tanks	Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 PSIA at maximum storage temperature	Maintain records of usage to verify insignificance.	Various

Units with recordkeeping requirements to verify their insignificance are noted in the appendix. Although the many of these sources are insignificant, similar sources collectively are reported in the air emission inventory. An example is the insignificant combustion sources (<5 MMBtu) such as infrared heaters, boilers, hot water heaters, etc. These emissions are estimated based on AP-42 emission factors based on total natural gas usage.

Appendix C provides a table of the aggregated Insignificant Sources category with a description of the groupings and an estimate of individual units within that category. Appendix D lists individual insignificant emission sources which do not fall into any of the general classifications of the aggregated sources.

#### Grandfathered Sources

Tinker AFB became subject to Oklahoma Air Quality permitting requirements as of August 7, 1977. Currently, Tinker AFB operates a number of emission units that were constructed prior to this date, and are considered grandfathered from permitting requirements. These sources are listed in Table 5 of this memorandum. Although these emissions units are not subject to permitting requirements, DEQ requests that the emissions from these sources be calculated and submitted with the annual Air Emissions Inventory. Turnaround documents have been and will continue to be prepared and submitted for all grandfathered sources. Table 2 contains a detailed

list of the grandfathered sources currently in operation.

**Table 2**

Summary of Grandfathered Sources*			
EU ID	Description	Location	Installation Date
3832	Emissions From Firing Rounds of Ammunition at Firing Range	Bldg 1023, Firing Range	~ 1950
4403**	Jet Engine Test Cells, Eight	Bldg 3703	1954
4404**	Jet Engine Test Cells, Four	Bldg 3234	1975
5401	F107/F112 Missile Engine Test Cells, Four	Bldg 214	1943

\* EC9, ExtComb-9, Dual-Fuel Boilers, also includes six dual-fuel “grandfathered” boilers that have are not subject to rules or limits. They were subject to the notification requirements of NESHAP Subpart DDDDD, however the courts vacated that rule effective July 30, 2007. Because they will be subject to the NESHAP when issued, they have not been included in the table above.

\*\* EUs 4403 and 4404 for the jet engine test cells were previously grandfathered, however they forfeited their grandfathered status when modified under construction permit 99-104-C M-4. Effective with the issuance of this permit, these units will no longer be classified as grandfathered and will be subject to emission limits and specific conditions incorporated in this permit.

## SECTION VI. EMISSIONS

Title V applicability is based on whether a facility is considered a “major” stationary source. A major stationary source in an attainment area is defined as having the potential to emit (PTE) criteria pollutants in quantities greater than 100 tpy, or hazardous air pollutants greater than 10 tpy for any single HAP, or 25 tpy for any combination of HAPs. As shown in Table 3, Tinker AFB is a major source of NO<sub>x</sub>, CO, VOC, and HAPs, and therefore is subject to Title V.

**Table 3**

Potential Emissions, in tons per year (TPY)							
Part 70 Source Category	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	CO	VOC	Single Largest HAP	All HAPs
<b>Previously Permitted, excluding Chemical Depainting<sup>(1)</sup></b>							
	95.91	1,203.88	80.14	841.69	1,205.56	14 (Perchloroethylene)	45 (est)
<b>Previously Permitted, Chemical Depainting</b>							
	--	--	--	--	125	--	--
<b>Pre-Modification Total</b>	<b>95.91</b>	<b>1,203.88</b>	<b>80.14</b>	<b>841.69</b>	<b>1330.56</b>	<b>14</b>	<b>45</b>
Modification							
<b>This PSD, Chemical Depainting<sup>(2)</sup></b>							
	--	--	--	--	400	--	--
<b>Post-Modification Total</b>	<b>95.91</b>	<b>1,203.88</b>	<b>80.14</b>	<b>841.69</b>	<b>1605.56</b>	<b>14</b>	<b>45</b>
<b>Emissions Subject to PSD Review Under This Permit</b>							
	--	--	--	--	400 <sup>(3)</sup>	--	--

Potential Emissions, in tons per year (TPY)							
Part 70 Source Category	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	CO	VOC	Single Largest HAP	All HAPs
SER	15/10	40	40	100	40	10	25
>SER	NO	NO	NO	NO	YES <sup>(3)</sup>	NO	NO

(1) Permit No. 2009-394-TVR, issued September 2, 2010

(2) This permit separates out depainting VOC emissions for the PSD and BACT analysis.

(3) The emission relaxation and PSD review will only affect the VOC emissions from the chemical depainting operations. The analysis in this permit involves only the chemical depainting VOC emissions.

The performance of non-HAP strippers used in 2014 and expected to be used in future compared to the non-HAP strippers (no longer available) that were used in previous years indicates that future usage of non-HAP stripper per aircraft will be considerably higher than the usage documented in earlier data. Tinker AFB is continuing to investigate available non-HAP strippers, with the goal of limiting VOC emissions, but the currently available data indicate that projected VOC emissions from chemical depainting activities at Tinker AFB will increase from the currently permitted 125 TPY to a projected 400 TPY. Because the chemicals in question contain zero HAPs, no change in annual emission of HAPs is projected.

Since the proportion of annual usage across the multiple affected emission units is anticipated to remain the same, the 2014 annual emissions usage data was used to approximate the VOC emission increase associated with each individual emission unit, as shown in the table below.

EUG ID	EU ID	Estimated VOC TPY under previous conditions (permitted)	Approximate TPY Emissions increase	Estimated Total VOC TPY due to Increased Zero HAP Stripper Usage
ChemDpnt-1	2031	1.10	3.66	4.76
ChemDpnt-2	2032	9.11	--	9.11
ChemDpnt-3	2051	0.01	--	0.01
ChemDpnt-2	2052	9.11	--	9.11
ChemDpnt-2	2053	9.11	--	9.11
ChemDpnt-1	2157	5.23	17.44	22.67
ChemDpnt-2	2158	9.11	--	9.11
ChemDpnt-1	2405	18.99	63.31	82.30
ChemDpnt-3	2406	0.01	--	0.01
ChemDpnt-1	2412	18.99	63.31	82.30
ChemDpnt-3	2413	0.01	--	0.01
ChemDpnt-1	2435	15.56	51.88	67.44
ChemDpnt-3	2436	0.01	--	0.01
ChemDpnt-2	2437	9.11	--	9.11
ChemDpnt-1	2540	0.10	--	0.10



EUG ID	EU ID	Estimated VOC TPY under previous conditions (permitted)	Approximate TPY Emissions increase	Estimated Total VOC TPY due to Increased Zero HAP Stripper Usage
ChemDpnt-2	2541	0.05	--	0.05
ChemDpnt-3	2452	0.10	--	0.10
ChemDpnt-3	2560	0.01	--	0.01
ChemDpnt-3	2621	0.01	--	0.01
ChemDpnt-1	3034	0.05	--	0.05
ChemDpnt-3	3036	0.01	--	0.01
ChemDpnt-3	3053	0.01	--	0.01
ChemDpnt-2	3062	0.10	--	0.10
ChemDpnt-3	3316	0.01	--	0.01
ChemDpnt-2	3317	0.10	--	0.10
ChemDpnt-3	3407	0.01	--	0.01
ChemDpnt-2	3846	0.10	--	0.10
ChemDpnt-3	4096	0.45	1.79	2.24
ChemDpnt-3	4097	0.45	1.79	2.24
ChemDpnt-3	4098	0.45	1.79	2.24
ChemDpnt-3	4446	0.01	--	0.01
ChemDpnt-3	4713	0.07	0.26	0.33
ChemDpnt-3	5017	0.01	--	0.01
ChemDpnt-3	5052	8.72	34.88	43.60
ChemDpnt-3	5053	8.72	34.88	43.60
ChemDpnt-3	5560	0.01	--	0.01
ChemDpnt-3	5600	0.01	--	0.01
<b>Total:</b>		<b>125.00</b>	<b>275.00</b>	<b>400.00</b>

Annual PTE emissions are typically based on full utilization of each EU at its design capacity. For EUs that have been issued an operating permit from the DEQ with enforceable maximum permitted emission limits, these levels remain in effect and are the PTE for those emission units. The “Permitted” category shown in Table 3 includes sources with DEQ permit limits. The “Grandfathered” sources are those without permit limits but which are considered significant due to applicable monitoring, recordkeeping, and/or reporting (MRR) requirements. Potential emissions from six boilers not subject to limitations are included in the grandfathered category. Emissions from mobile sources, such as on- and off-road vehicles, ground support equipment (GSE) and aircraft engines in flight operations, are not included in PTE calculations.

Tinker AFB conducts an Annual Emission Inventory of HAP and Toxic Air Contaminants (TAC), in accordance with Oklahoma Administrative Code, OAC 252:100-5. This Oklahoma rule states that the “emission inventory means a compilation of all point source, storage and process fugitive air emissions for all regulated air pollutants at a given facility.

The actual emissions reported on the recent Annual Emission Inventories (AEI) are considerably less than the total PTE levels. PTE levels are included here primarily for the purpose of

documenting Title V applicability.

As a major source for HAP emissions, certain activities at Tinker AFB may be subject to NESHAP regulations, including various Maximum Achievable Control Technology (MACT) standards. Specific applicability determinations for the NESHAPs and other state, local, and federal regulations, are discussed in more detail in Sections VII and VIII below.

For the purpose of determining Tinker AFB's status as a "major source" under Prevention of Significant Deterioration (PSD) regulations, a summary of estimated actual annual criteria emission levels is presented in Table 3. These emission estimates are based on various methodologies, depending on the availability of data for the numerous sources, and do not include "insignificant" sources. The data presented in Table 4 are not permit limits, and should not be construed as such.

**Table 4**

Summary of Annual Emissions Inventories, tpy					
Year	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	CO	VOC
1999	32.0	255.9	1.3	324.9	466.1
2000	29.2	278.3	15.0	287.0	513.5
2001	23.8	243.9	14.4	229.7	521.7
2002	24.5	251.4	19.7	246.9	441.7
2003	12.5	227.6	18.7	183.8	553.1
2004	12.5	228.8	16.8	188.9	511.6
2005	9.8	193.1	12.6	153.4	272.1
2006	7.2	188.9	8.7	132.7	302.9
2007	8.7	194.3	11.8	140.3	229.8
2008	15.4	200.5	14.0	140.5	239.8

PSD thresholds of 250 tpy for these pollutants have been established. Based on the permitted levels of emissions which can exceed those presented in Table 3, Tinker AFB is a PSD major source for NO<sub>x</sub>, CO and VOC.

Oklahoma now regulates HAP and TAC under Subchapter 42. Subchapter 42 reduced the number of TAC regulated, developed a process for identifying potential areas of concern for individual TAC, and incorporated a methodology to resolve verified maximum acceptable ambient concentration (MAAC) exceedances which present a potential environmental hazard. The process applies only to the TAC listed in Appendix O of Oklahoma Administrative Code, OAC 252:100, and subject to this Oklahoma toxics rule. Tinker AFB will continue to monitor regulated pollutants, calculate emissions, and report associated emissions in their annual air emission inventory (AEI) report.

## SECTION VII. PSD REVIEW

The PTE calculations for the air emission sources, which are the subject of this permitting action, will result in facility-wide PTE emission increases exceeding the significant emission rates (SERs) for VOCs (major source threshold of 40 TPY). Because the facility will be a PSD major source, this permitting action must include a PSD review.

**A. Project Emission Increases**

The project will be a major modification to an existing major stationary source due to the exceedance of the PSD significance levels. This project must undergo best available control technology (BACT) analysis and modeling for each regulated pollutant that exceeds the facility's projected PTE significance level. PTE means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.

Because the project results in significant emissions of VOC, this project is subject to PSD and the applicant is required to apply BACT to each emission unit at which a net increase in the pollutant would occur, to conduct a facility air quality impact analysis for each regulated pollutant that exceeds the significant emission increase threshold, and to perform monitoring, if applicable.

**B. BACT**

BACT results in a specific emission limitation based on the maximum degree of reduction for each pollutant and emission unit, on a case-by-case basis, taking into account technical feasibility, energy, environmental, and economic impacts. The case-by-case BACT determination results from an analysis referred to as a "top-down" analysis.

The top-down analysis required for BACT involves the identification of all applicable control technologies in order of effectiveness. The review is then conducted beginning with the "top," or most effective emission control and/or reduction technology to determine if the technology is technologically, environmentally, and economically feasible. If the analysis reveals that a technology is not feasible based on any of these criteria, the next most effective control technology is then evaluated in the same manner. This is continued until the control technology under consideration cannot be eliminated based on technological feasibility, environmental impacts, or economics. This control technology is then proposed as BACT.

The top-down BACT approach must not only look at the most stringent emission limits previously approved, but it also must evaluate all demonstrated and potentially applicable technologies, including innovative controls, lower polluting processes, etc. These technologies and emission limits are generally identified through a review of the EPA RACT/BACT/LAER Clearinghouse (RBLCL). If the proposed BACT is equivalent to the most stringent emission limit (top), no further analysis is necessary. However, if the most stringent emission limit is not selected, additional analyses are required. Any decision to require a lesser degree of emissions reduction must be justified by an objective analysis of "energy, environmental, and economic" impacts, as described previously.

The determination of what constitutes BACT is left to ODEQ, and allows that agency to consider

the weight or emphasis to be placed on the energy, environmental, and economic impacts of control. This allows ODEQ to consider, on a case-by-case basis, the size of the facility, the increment of air quality that will be absorbed by any particular major-emitting facility, anticipated and desired economic growth for the area, and other concerns that may impact the agency's decision-making process. In no event can the application of BACT be less stringent than any applicable NSPS or NESHAP standard. BACT should be established as a numerical emission limit or standard in the permit.

The five basic steps involved in the top-down BACT analysis are listed below:

- Step 1. Identify Available Control Technologies
- Step 2. Eliminate Technically Infeasible Options
- Step 3. Rank Remaining Control Technologies by Control Effectiveness
- Step 4. Evaluate Most Effective Controls Based on Energy, Environmental, and Economic Impacts
- Step 5. Select BACT and Document the Selection as BACT

If due to technological or economic limitations to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means that achieve equivalent results.

The facility is proposing to increase material usage for currently permitted depainting/stripping for operations. The stripper used to remove the residual paint from the surface of the aircraft will be formulations that meet Aerospace NESHAP VOC limits. No VOC controls are currently utilized for these operations.

#### **Step 1 - Identify Available Control Technologies**

A review of previous BACT analyses, the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) were reviewed for possible control technologies that are available on the market and proven practice in the aerospace or other industries with similar requirements for coating very large objects.

<b>Control Technologies Identified for BACT Analysis</b>	
<b>Pollutant</b>	<b>Control Technologies Identified</b>
VOC	Regenerative Thermal Oxidizer
	Carbon Adsorption
	Thermal Oxidizer
	Regenerative Thermal Oxidizer with concentrator
	Best Management Practices

#### **Step 2 - Eliminate Technically Infeasible Options**

The control technologies in Step 1 have been demonstrated and achieved in practice and, therefore, could be feasible technologies for implementation at Tinker AFB for the depainting

facilities. Good work practices to minimize VOC emissions is the base case for BACT.

### Step 3 - Rank Control Technologies by Control Effectiveness

The potential control options provided above have been ranked based on the control efficiencies documented as being achieved in practice.

The location most utilized for aircraft depainting activities is Building 2122 (B2122). Based on discussions with B2122 personnel, the maximum anticipated VOC emissions from this location would be 300 TPY. Tinker recognizes that any permit issued as a result of this BACT emissions assumption will likely result in a “per location” emission limitation equal to the maximum assumed emissions for this ‘representative’ emission location. Tinker therefore requests, in addition to the requested 400 TPY permit limitation for chemical depainting, an additional limit specified as 300 TPY maximum VOC from depaint activities applied individually at any of the following depaint hangars: Building 2122, Building 2280, Building 3225, Building 3228, Building 9001.

#### Ranking of VOC Control Technologies by Effectiveness

Pollutant	Control Technologies	Approximate Control Efficiency
VOC	Regenerative Thermal Oxidizer	99.3
	Carbon Adsorption	99.3
	Thermal Oxidizer	98.9
	Regenerative Thermal Oxidizer with concentrator	93.2
	Best Management Practices	N/A

### Step 4 - Evaluate Most Effective Controls Based on Impacts

An economic evaluation was performed on the technologies ranked in Step 3. Cost effectiveness of the various VOC control technologies for depainting operations is summarized below.

#### Aircraft Depainting Emissions Control Cost Comparison

Type of Control Technology	Vendor Name	Capital Cost (\$)	O&M Costs (\$)	Total Annualized Costs	VOC Worst Case (TPY)	VOC Removed (TPY)	Cost Effectiveness (\$/ ton of VOC Removed)
Regenerative thermal oxidizer	Epcon	\$23,278,185	\$7,832,308	9,384,187	300	298	\$31,501
Carbon adsorption	Thermal Recovery Systems	\$950,164	\$31,508,160	31,698,193	300	298	\$106,405
Thermal oxidizer	Callidus	\$9,699,244	\$47,265,781	47,912,397	300	297	\$161,484
Thermal oxidizer w/preheater	Callidus	\$19,398,488	\$22,523,501	23,816,733	300	297	\$80,272
Thermal oxidizer w/preheater	John Zink	\$31,037,580	\$34,154,689	36,223,861	300	297	\$122,089
Regenerative thermal oxidizer w/concentrator	Anguil	\$15,518,790	\$2,354,918	3,389,504	300	280	\$12,123

### Step 5 - Select BACT and Document the Selection as BACT

The table above shows the technology options are not economically feasible.

As BACT for VOC depainting operations, Tinker AFB will use good work practices to minimize

VOC emissions in compliance with the Aerospace NESHAP VOC emission standards in 40 CFR 63, Subpart GG, as summarized in the following table.

**Summary of Selected BACT for Painting/Depainting Operations**

Pollutant	Production Activity	Control Technology
VOC	Low-VOC vapor-pressure cleaning solvents and strippers.	Less than 45 mm Hg at 20°C or as specified in Table 1 of 40 CFR 63, Subpart GG.
	Solvents and stripper application	Low-pressure applicators or manual application.
	Work practice	Good work practices in compliance with Aerospace NESHAP (40 CFR 63, Subpart GG)

### C. Air Quality Impacts

Tinker AFB is located in Oklahoma County, Oklahoma, which has been designated as attainment or unclassifiable for all criteria pollutants. In accordance with Oklahoma Administrative Code (OAC) 252:100-8-35, one of the requirements to obtain a PSD permit is the performance of an air quality impact evaluation for all pollutants with proposed emissions in excess of their respective PSD SER. The proposed PTE of VOCs from this project exceed the PSD SER. The air quality impact evaluation consists of an air quality modeling analysis and additional impact analysis to determine air quality impacts on local soils, vegetation, and visibility.

#### Air Quality Impact Modeling

##### **Ozone Monitoring**

Pre-construction monitoring for ozone is required for any new source or modified existing source located in an unclassified or attainment area with greater than 100 tons per year of VOC emissions. Continuous ozone monitoring data must be used to establish existing air quality concentrations in the vicinity of the proposed source or modification.

Site	Distance	Average 4 <sup>th</sup> High 2013-2015*	Average 4 <sup>th</sup> High 2012-2014	Standard
40-109-0033	7.28 miles NW	0.069ppm	0.073ppm	0.075ppm
40-109-0096	6.33 miles NE	0.067ppm	0.071ppm	0.075ppm

\*The average of the 4<sup>th</sup> high monitored 8-hour ozone values from 2013 through September 21 of 2015.

##### **Ozone Modeling**

OAC 252:100-8-35 requires an air quality impact evaluation for each regulated pollutant for which a major modification would result in a significant net emissions increase. No de minimis air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds subject to PSD is required to perform an ambient impact analysis. Methods for evaluating single source impacts on ozone concentrations are not consistent, due to the lack of availability of data at a refined level, readily available tools and EPA guidance. TAFB has evaluated the impact of the proposed modification to the facility using an existing air quality database generated for a SIP evaluation and the CAMx photochemical modeling system.

***Episode Selection***

For the state of Oklahoma, 2011 and 2012 are the most recent years with existing summer ozone photochemical grid modeling databases. The currently available ozone modeling databases were reviewed, and the Texas Commission on Environmental Quality (TCEQ) modeling database for the June 2012 period was selected. EPA's 2011 modeling platform was considered due to the fact that it is aligned with the 2011 National Emissions Inventory (NEI2). However 2011 had anomalous meteorological and other conditions in the Oklahoma region. 2011 was the hottest summer in a 117-year record. 2012 was hotter than normal but not the single hottest summer during the period of record. 2011 was the worst drought in Texas since detailed records have been kept with the drought extending into Oklahoma. The summer of 2011 had unusually low precipitation with the lowest on record in Texas and third lowest on record in Oklahoma. Although precipitation in summer of 2012 was below normal, it was not an outlier like 2011. There were numerous severe wildfires in Texas and Oklahoma during 2011 that likely contributed to elevated ozone concentrations in the region. During summer 2011, a wildfire occurred which caused an evacuation of portions of OKC. Therefore, it was determined that the period for 2012 represents a more typical year.

***Model Selection***

The TCEQ used the Comprehensive Air quality Model with extensions (CAMx; Ramboll Environ, 2015) version 6.11 with the Carbon Bond 6 revisions 2 (CB6r2; Yarwood et al., 2010) chemical mechanism for their June 2012 PGM modeling database. The CAMx model satisfies EPA's selection criteria for ozone modeling and is explicitly mentioned as appropriate for ozone modeling in EPA's latest air quality guidelines (EPA, 2015) and guidance (EPA, 2014d). Thus, CAMx was selected for the new TAFB emissions ozone sensitivity modeling.

***Domain***

For the new TAFB emissions ozone sensitivity modeling, the TCEQ 36 km CONUS and 12 km TXOK domains were retained, and a new 4 km OKC-TAFB-Tulsa modeling domain was added. The 4 km domain is a rectangle which extends west through Caddo County, south through Stephens County, east through Tulsa County and north through three quarters of Garfield County. CAMx was run with the 36/12/4 km domains using two-way grid nesting. The 4 km TAFB domain was defined using the CAMx flexi-nest feature where the 4 km meteorological and emission inputs are interpolated from the 12 km TXOK domain inputs.

***Meteorological and Emission Modeling***

Meteorological and emissions modeling for the June 2012 modeling database was conducted by the TCEQ. The meteorological inputs were based on the Weather Research Forecast (WRF4; Skamarock et al., 2004; 2005; 2006) model, and emissions inputs were prepared using version 3 of the Emissions Processing System (EPS35). The TCEQ's CAMx meteorological and emission inputs for the 36/12 km domains and the June 2012 period were used without alteration.

***Model Performance***

The individual site ozone model performance metrics are compared against the EPA ozone performance goals. However, this is a particularly stringent test because the ozone performance goals were designed for comparison of ozone performance across a region with multiple sites.

Thus, there are opportunities for a site with ozone overestimations to offset a site with ozone underestimations that does not occur when examining performance at an individual site. Therefore, a site failing to achieve the ozone performance goals may not be a cause for concern, particularly if it is close to achieving the ozone performance goal.

The Daily Maximum 8-hour (DMAX8) ozone Normalized Mean Bias (NMB) and Fractional Bias (FB) are 12.8% and 13.0%, respectively, which achieves the  $\leq \pm 15\%$  ozone performance goal. The DMAX8 ozone Normalized Mean Error (NME) and Fractional Error (FE) are both 14.1%, which is lower than the ozone error performance goal ( $\leq 35\%$ ) by over a factor of two. The hourly ozone bias (11.4% and 12.8%) and error (24.0% and 26.9%) metrics also achieve the ozone model performance goals. The DMAX8 and hourly ozone from the model are highly correlated with the observed values with correlation coefficients of 0.87 and 0.71, respectively.

At the 11 individual ozone monitoring sites in the 4 km domain, the ozone performance goal was achieved 86% of the time for DMAX8 ozone and 73% of the time for hourly ozone. When the ozone performance goals were not achieved, it was due to an overestimation bias that usually was slightly above the upper bound of the ozone bias performance goal ( $\leq \pm 15\%$ ). The CAMx Base Case reasonably performed in tracking the day-to-day variations of the observed DMAX8 ozone concentrations; thus, the model is capturing many of the processes and phenomena that lead to elevated ozone concentrations in Oklahoma.

#### ***New TAFB Emissions Ozone Modeling***

Emissions associated with the new VOC, NO<sub>x</sub> and CO emissions at TAFB were added to the 2012 Base Case emissions. There are two PSD projects at TAFB, each with total VOC emissions that exceed the PSD significance threshold. The NO<sub>x</sub> and CO emissions associated with the two projects do not exceed the PSD significance threshold; however, they were included in the PGM ozone modeling analysis.

In the new TAFB project inventory, some of the VOC emissions were provided as explicit VOC species (for example, methyl isobutyl ketone), and the remaining were provided as unspciated VOC. EPS3 uses speciation profiles to convert explicit and unspciated VOC emissions into CB6 model species. Preprocessed VOC emissions were modeled at 608 TPY. This emission rate reflects the cumulative projected increase above existing emissions for permit 2009-394-C (M-3) PSD and the full potential emission from 2009-394-C (M-4) PSD. Individually, 2009-394-C (M-3) PSD is a retroactive PSD permit where VOC emissions have increased to address a correction in products used and 2009-394-C (M-4) PSD evaluates future increased emissions from the KC-46A project. These projects are separate but are undergoing PSD evaluation at the same time therefore emissions were combined in the modeling study. While the M-3 permit has been evaluated at the full increase, rather than merely the difference due to the correction; as these emissions are already captured in the monitoring data, this method would overestimate the projected ozone impact in a cumulative analysis that takes in to account the M-4 emissions as well. Therefore the 608 TPY reflects the increase in VOC emissions from the correction in (M-3) and the full increase from (M-4). The full increase from M-3 was 400 TPY of VOC and the new emissions for M-4 were 319 TPY of VOC. Modeling results from the 608 TPY evaluation can be considered to provide conservative results for each project, as it is greater than each individual potential, and a cumulative impact that reflects only new added emissions.



The maximum increase in DMAX8 ozone due to the new TAFB emissions was 0.10 ppb that occurred on June 4 and June 26, 2012. The effect of the new TAFB emissions would not be seen in the ozone measurements.

#### **D. Additional Impact Analysis**

An additional impacts analysis was performed as part of this application that considered existing air quality, the quantity of emissions, and the sensitivity of local soils, vegetation, and visibility in the source's impact area. The following impacts were addressed:

- Class I Area Impacts
- Class II Area Visibility Impacts
- Growth Impact Analysis
- Soil and Vegetation Impact Analysis

##### Class I Area Impacts Analysis

Class I areas are defined by EPA's *New Source Review Manual* as those areas of the nation that are of special natural scenic, recreational, or historic interest to the public. The nearest Class I area to Tinker AFB is the Wichita Mountain Wildlife Refuge, located approximately 135 kilometers (km) southwest of the facility.

Class I area analyses examine two separate items: 1) Class I increments and 2) air quality-related values (AQRVs). EPA regulates Class I increment modeling, while AQRVs are regulated by the U.S. Forest Service (USFS) Federal Land Manager (FLM). For the Class I increment analysis, the impacts of the facility in the general direction of the Class I area are compared to the Class I SIL. However, EPA has not established VOC or ozone SILs.

The FLM considers a source located greater than 50 km from a Class I area to have negligible impacts with respect to Class I AQRV if its total SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, and sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) annual emissions (in TPY), divided by the distance (in km) from the Class I area (Q/D), is 10 or less. Since the proposed project does not include increases in any of these pollutants, a Class I AQRV analysis is not necessary.

##### Class II Area Visibility Impacts Analysis

According to ODEQ's *Air Dispersion Modeling Guidelines* (April 2011), applicants proposing to construct PSD major sources within 40 km of a Class II sensitive area are required to use the VISCREEN model to address the visibility impacts within the Class II sensitive area. Tinker AFB is not located within 40 km of any Class II sensitive area, with the nearest such area to the facility located at a distance of more than 100 km. Therefore, no VISCREEN modeling is required.

##### **1.1.1 Growth Impact Analysis**

A growth analysis is intended to quantify the amount of new growth likely to occur in support of the facility and to estimate emissions resulting from that associated growth. Associated growth includes residential and commercial/industrial growth resulting from the new facility. Residential growth depends on the number of new employees and the availability of housing in the area, while associated commercial and industrial growth consists of new sources providing

services to the new employees and the facility. No additional residential and commercial/industrial growth will result from the new facility because it will be located in an area that has an available population to supply employees, and the area is currently commercially/industrially developed.

#### Soil and Vegetation Impacts Analysis

The effects of gaseous air pollutants on vegetation may be classified into three broad categories: acute, chronic, and long term. Acute effects are those that result from relatively short (less than 1 month) exposures to high concentrations of pollutants. Chronic effects occur when organisms are exposed for months or even years to certain threshold levels of pollutants. Long-term effects include abnormal changes in ecosystems and subtle physiological alterations in organisms. Acute and chronic effects are caused by the gaseous pollutant acting directly on the organism, whereas long-term effects may be indirectly caused by secondary agents, such as changes in soil pH. It is expected that compliance with the primary and secondary NAAQS will ensure that emissions from the facility will not adversely affect vegetation or soils in the surrounding area. The maximum predicted concentrations of VOC and GHG emissions from the proposed facility are not expected to have adverse impacts on soils and vegetation.

### **SECTION VIII. OKLAHOMA AIR POLLUTION CONTROL RULES**

OAC 252:100-1 (General Provisions) [Applicable]  
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]  
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the “Federal Regulations” section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]  
Primary standards are included in Appendix E and Secondary Standards are included in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards. Significant emission sources have been modeled to confirm compliance with National Ambient Air Quality Standards (NAAQS) for both NO<sub>x</sub> and SO<sub>2</sub>. Modeling was not performed for PM, because Tinker AFB is a minor source of PM and Oklahoma monitoring results indicate that background ambient concentrations for PM are far below the NAAQS for PM<sub>2.5</sub> and PM<sub>10</sub>.

OAC 252:100-5 (Registration, Emission Inventory and Annual Operating Fees) [Applicable]  
Subchapter 5 requires sources of air contaminants to register with ODEQ Air Quality Division (AQD), file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories have been submitted and fees paid for previous years as required.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]  
Part 5 includes the general administrative requirements for Part 70 permits. Any planned

changes in the operation of the facility that result in emissions not authorized in the permit or emissions at levels that exceed the thresholds for “Insignificant Activities” or “Trivial Activities” require prior notification to ODEQ and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits:

- 5 tpy of any one criteria pollutant
- 2 tpy of any one hazardous air pollutant (HAP) or 5 tpy of multiple HAPs or 20% of any threshold less than 10 tpy for a single HAP that the EPA may establish by rule

Tinker AFB submitted a Title V permit application on March 5, 1999. The Title V Operating permit for Tinker AFB was issued on May 11, 2005, with subsequent updates. Currently, Tinker AFB is operating under Permit No. 2009-394-TVR issued on September 2, 2010. In addition, ODEQ has issued three construction permits, one for the modification of the engine test cells, one for relocation of the fuel component testing operations, and the third being the original KC-46A PSD permit (Permit Number 2009-394-C (M-2) (PSD)).

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are based on information in the application and current operating permit, or developed from the applicable requirements.

Part 7 A PSD evaluation was completed for all regulated new source review (NSR) pollutants for which the proposed material usage increase resulted in a significant emission increase ( $\text{NO}_x$ , CO, VOC, PM,  $\text{PM}_{10}$ ,  $\text{PM}_{2.5}$ , and  $\text{CO}_2\text{e}$ ). Section 5B of this permit contains BACT analyses for those regulated NSR pollutants for which the project will result in a significant emission increase. Section 5C of this permit contains ambient air quality analyses for each PSD-subject pollutant, and Section 5D of this permit contains additional impacts analyses for the PSD-subject pollutants.

The permittee has requested and been granted a “permit shield” for this facility. All applicable air pollution control rules and regulations are listed in the “Specific Conditions” or in the “Standard Conditions.” Compliance with the terms and conditions of this permit will be deemed compliance with the applicable requirements identified and included in this permit. Those rules and regulations that have been determined to not apply are listed in specific conditions #6.

Emission limitations for all the sources are taken from the permit application and the previous permits.

All Title V permit renewal applications are classified as Tier II permits requiring both public and EPA review. This renewal deletes several removed/decommissioned sources from the permit specific conditions. In addition, this renewal permit incorporates the requirements from the two construction permits mentioned above, for modification of the engine test cells, and for the new fuel overhaul and test facility for fuel component testing operations.

OAC 252:100-9 (Excess Emission Reporting Requirements) [Applicable]

Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions

shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for affirmative defense, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-11 (Alternate Emissions Reduction Plans & Authorizations) [Not Applicable]  
Allows for alternative emissions reductions. This has not been requested by the permittee.

OAC 252:100-13 (Open Burning) [Applicable]  
Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter. Operation of the fire training facility is authorized.

OAC 252:100-17 (Incinerators) [Not Applicable]  
The previously permitted Therm-Tec Model AR-89 classified waste incinerator was decommissioned on November 12, 2007. The EUG IN1 has been deleted from the Permit and specific conditions. Tinker AFB does not have any other incinerators.

OAC 252:100-19 (Particulate Matter (PM)) [Applicable]  
This subchapter specifies PM emission limits based on heat input capacity and applies to the combustion of fuel in any new or existing fuel-burning unit. Emissions shall not exceed the limits specified in Appendix C, also shown below.

**Table 11**

<b>Particulate Matter Compliance with Appendix C</b>				
<b>Unit</b>	<b>Heat Input Capacity (MMBtu)</b>	<b>PM Emission Limit from OAC 252:100-19 APP C (lb PM/MMBtu)</b>	<b>Estimated Emission Rate Fuel Oil <sup>(a)</sup> (lb PM/MMBtu)</b>	<b>Estimated Emission Rate Natural Gas <sup>(b)</sup> (lb PM/MMBtu)</b>
Boilers - B3001	121	0.332	0.0236	0.0076
Boiler - B3001	75	0.372	0.0236	0.0076
Boiler - B2212	85	0.361	0.0236	0.0076
Boilers - B208	116	0.335	0.0236	0.0076
Boilers - B208	14.3	0.552	0.0236	0.0076
Boiler - B5802	29	0.467	0.0236	0.0076
Boiler - B821	20	0.510	0.0236	0.0076
Boiler - B964	9.68	0.600	NA	0.0076
Boilers - B9301	190	0.298	NA	0.0076

(a): Emission rate calculated using emission factor from USEPA, AP-42 (7/98), Section 1.3

(b): Emission rate calculated using emission factor from USEPA, AP-42 (7/98), Section 1.4

Emission factors from AP-42 for fuel oil combustion are rated "A" for filterable and "D" for condensable PM, and these emission factors were combined to provide an emission factor for total PM. Similarly, natural gas emission factors from AP-42 are rated "A" for filterable and "D" for

condensable PM, and were combined to provide an emission factor for total PM. These emission factors are considered representative of expected emission rates in absence of specific manufacturers' data, and are well below emission rates listed as limits in Appendix C of the regulation.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]

No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity.

OAC 252:100-29 (Fugitive Dust) [Applicable]

No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Under normal operating conditions, all activities at this facility will have insignificant fugitive dust emissions, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]

Part 2, Ambient air concentration limits or impacts for new and existing equipment, sources or facilities, Section 31-7 contains concentration limits for sulfur dioxides. The only combustion sources affected by the requirements of paragraph "(a) Sulfur oxides" are the grandfathered boilers which qualify as existing equipment per the definition in Section 31-2. The affected steam plants include four 116-MMBtu/hr boilers in building 208 and the two 29-MMBtu/hr boilers in building 5802.

Tinker AFB modeled SO<sub>2</sub> emissions using EPA's AERMOD program to determine potential impacts. The model results indicated the potential to exceed the standards if these six boilers were simultaneously operated on fuel oil at maximum rated heat input. Although it is doubtful that more than one or two would operate simultaneously, Tinker AFB determined that allowing operation of only one of the 29 MMBtu/hr units in building 5802 at a time would ensure compliance with the standard. Likewise limiting the fuel oil consumption to one of the boilers in building 208 would ensure compliance with the standard. The maximum predicted impacts, based on above restrictions, are shown in Table 12.

**Table 12**

<b>Sulfur Dioxide Impacts at 0.3 % S (OAC 252:100-31-7 *)</b>					
<b>Bldg 5802</b>	<b>Heat Input</b>	<b>Averaging Period</b>	<b>SO<sub>2</sub> Limit (µg/m<sup>3</sup>)</b>	<b>Predicted SO<sub>2</sub> Concentration (µg/m<sup>3</sup>)</b>	<b>Comment</b>
1 boiler	29 MMBtu/hr	1-Hr	1200	1052	1 at 100%
		3-Hr	650	587	
		24-Hr	130	127	
		Annual	80	8	

Sulfur Dioxide Impacts at 0.3 % S (OAC 252:100-31-7 *)					
Bldg 5802	Heat Input	Averaging Period	SO <sub>2</sub> Limit (µg/m <sup>3</sup> )	Predicted SO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	Comment
<b>Bldg 208</b>					
1 boiler	116 MMBtu/hr	1-Hr	1200	1184	1 at 400 gals/hr
		3-Hr	650	120	
		24-Hr	130	27	
		Annual	80	2	

\* Table only provides modeled impacts for use of 0.3 % sulfur fuel oil. Burning commercial natural gas, the primary fuel, is well below any 31-7 limits.

Table 13 shows SO<sub>2</sub> impacts predicted for steam plants 208 and 5802 using low sulfur fuel oil (0.05 % sulfur by weight) and with the raincaps removed from the 116-MMBtu/hr units installed in building 208.

**Table 13**

Sulfur Dioxide Impacts at 0.05% S (OAC 252:100-31-7)					
Buildings 208 & 5802	Heat Input	Averaging Period	SO <sub>2</sub> Limit (µg/m <sup>3</sup> )	Predicted SO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	Year
all boilers	116 MMBtu	1-Hr	1200	694.94	2001
		3-Hr	650	290.11	2002
		24-Hr	130	67.85	2001
		Annual	80	10.29	2001

Part 5, New equipment standards, Section 31-25 contains emission limits for fuel-burning equipment. These standards apply to all new equipment as defined in Section 31-2. With the exception of the four units in building 208 and the two in building 5802, the other boilers are subject to the gas-fired and liquid-fired fuel-burning new equipment standards. The limits are:

- (a) Gas-fired. The gas-fired standard states that no person shall cause, suffer, or allow the discharge into the atmosphere of sulfur oxides measured as sulfur dioxide in excess of 0.2 lbs/MMBtu heat input, maximum three-hour average from gas fuel-burning equipment. This rule is considered separately within the respective EUG discussion. Commercial natural gas has a sulfur content of 2,000 grains/MMscf which is significantly less than 0.001 lbs/MMBtu. Therefore sulfur dioxide emissions in excess of 0.2 lbs/MMBtu are not expected when using natural gas.
- (b) Liquid-fired. No person shall cause, suffer, or allow the discharge into the atmosphere of sulfur oxides measured as sulfur dioxide in excess of 0.8 lbs/MMBtu heat input, maximum three-hour average from liquid fuel-burning equipment. Tinker AFB uses fuel oil with low sulfur content as defined in the New Source Performance Standards, Subpart Db. This limit is more restrictive than the 0.8 lb/MMBtu in this rule. Assuming the combustion devices burn the fuel oil containing 0.3% weight sulfur and all sulfur in the fuel is released, a maximum of 0.31 lbs/MMBtu is expected when using this fuel. Therefore liquid-fired boilers will be in compliance with this standard.

OAC 252:100-33 (Control of Emissions of Nitrogen Oxides)

[Applicable]

This subchapter sets limits of NO<sub>x</sub> emissions from fuel-burning equipment with a rated heat input of 50 MMBtu/hr or more. Limits for NO<sub>x</sub> emissions are 0.2 lbs/MMBtu for natural gas

and 0.3 lbs/MMBtu for fuel oil. Tinker AFB operates 7 boilers that exceed the 50-MMBtu threshold and has 3 additional units located in TAC which are currently idle. In an effort to streamline this permit renewal, Tinker AFB has provided data in Table 1 in Section I (Introduction & Requested Changes) under the Oklahoma 3-hr NO<sub>x</sub> standard with compliance summary with the standard.

Based on the data in the table, compliance with the subchapter requirements should not present any future issues. However, to ensure that all regulatory requirements are addressed in the specific conditions, specific conditions have been added for applicable units. These conditions list the compliance verification by specifying recognized methodology under the monitoring, recordkeeping and reporting section of each applicable EUG.

OAC 252:100-35 (Control of Emissions of Carbon Monoxide) [Not Applicable]  
This facility operates of the affected sources: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Control of Emissions of Volatile Organic Compounds (VOCs)) [Applicable]  
This rule is considered separately for each activity likely to produce VOC emissions within the respective EUG discussion.

Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. All gasoline storage tanks subject to this rule are in EUG Tanks 2 and are equipped with a permanent submerged fill pipe, and thus are in compliance. Tinker AFB also has one 42,000-gallon gasoline storage tank (EUG Tank 1) which is subject to 40 CFR 60 Subpart Kb and thus exempt from Section 37-15(a) and (b).

Part 5 limits the VOC content of coatings used in coating lines and operations. Coating of parts and products is considered under Section 37-25. The Air Quality Division (AQD) is in the process of reviewing and proposing changes to Subchapter 37 to address overlap issues with Subchapter 37 and Subchapter 39. In the interim, compliance with OAC 252:100-39-47 and 40 CFR 63 Subpart GG satisfies the requirements of Part 5. Once changes to Subchapter 37 are finalized, Tinker shall comply with those requirements. The facility shall use compliant coatings for sources not addressed in 39-47 or GG. Routine maintenance of the facility and equipment is exempt. The permit may be re-opened in the future to address compliance with the finalized rule.

OAC 252:100-39 (VOCs in Nonattainment and Former Nonattainment Areas) [Applicable]  
This rule is considered separately for each activity likely to produce VOC emissions within the respective EUG discussion.

This subchapter imposes additional conditions beyond those of Subchapter 37 on emissions of organic materials from new and existing facilities in Tulsa and Oklahoma Counties.

Section 39-41 requires storage tanks with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. Tinker AFB has one 42,000-gallon gasoline tank equipped with a floating roof meeting the requirements of this rule. In addition, seven smaller tanks exceed the capacity and store gasoline with a vapor pressure greater than the threshold. These tanks are equipped with a submerged fill pipe to comply with this rule.

Subsection 39-42(a) covers cold cleaning units, noting standards for construction and operation

of such equipment. Paragraph 1 outlines equipment standards, including doors or covers, closed drainage, and conspicuous labeling. Paragraph 2 describes operating requirements; namely, appropriate draining procedures and times, keeping the unit covered when not in use, proper storage and disposal of waste solvent, and stipulates that spraying of VOC can only be in a solid stream. Paragraph 3 outlines requirements for controls if the solvent's vapor pressure exceeds certain limits. Paragraph 4 lists compliance and recordkeeping criteria.

The facility cleans aerospace parts utilizing cold cleaning units which meet the definition of clean flush operations as defined in the Aerospace MACT, 40 CFR 63, Subpart GG. In addition, a number of cold cleaning tanks are used for cleaning non-aerospace parts. All of the cold cleaning units are subject to this subsection.

Subsection 39-42(b) covers vapor type metal degreasers, noting standards for construction and operation of such equipment. Paragraph 1 outlines equipment standards including doors and covers in Subparagraph A; safety switches in Subparagraph B; equipment specifications such as freeboard, chillers, etc., in Subparagraph C; and conspicuous labeling of the equipment in Subparagraph D. Paragraph 2 describes the labeling information required to comply with Subparagraph 1(D). Paragraph 3 lists compliance and recordkeeping criteria. The facility complies with the requirements in (b)(1)(C), stating that compliance with the Halogenated Solvent Cleaning MACT (40 CFR 63, Subpart T) demonstrates efficiency greater than or equal to any of the other options. Compliance with the MACT constitutes compliance with this rule and further discussion is included under the MACT regulation. All other listed standards are met for each of the machines.

Section 47 covers VOC emissions from aerospace industries coating operations, with requirements specifically applicable to aerospace vehicle and component coating operations at aerospace manufacturing, rework, or repair facilities located in Tulsa County that have the potential to emit more than 10 TPY of VOC from coating operations. Coating operations include associated cleaning operations and surface preparation. This section is modeled on, and closely tracks, the Aerospace MACT found in federal NESHAP, 40 CFR 63 Subpart GG. With the exception of "specialty coatings," as that term is defined in §39-47(c)(5), standards and requirements for VOC content, application equipment, control equipment, housekeeping measures, solvent cleaning operations, and general standards reference appropriate sections of GG. Standards for specialty coatings are addressed in §39-47(d). With the exception of specialty coatings, each of these areas has been addressed in Section V (Federal Regulations). Note that the low volume exemption is modified in §39-47 to include specialty coatings in the 50-gallon/200 gallon standard. In similar fashion, monitoring, recordkeeping, and test methods reference appropriate sections of GG, excepting specialty coatings. These topics were also addressed in Section V. The compliance date provisions of §39-47(h) also reference GG, stating that compliance with GG constitutes a demonstration of compliance with §39-47, again with particular attention paid to specialty coatings.

The VOC content of specialty coatings must meet the specifications listed in OAC 252:100 Appendix N. These standards shall be met by as-applied coatings, but do not apply to touch-up, aerosol, or DOD "classified" coatings. Compliance with the specialty coating VOC limits may be achieved through the use of control equipment, provided that the equipment has a combined capture and control efficiency of 81% or greater by weight. If control equipment is used to comply with the Appendix N standards, a monitoring plan describing the parameter and its range shall be submitted, and the equipment must be installed, calibrated, operated and maintained according to the manufacturer's specifications. Monitoring records of the parameter(s) shall be



maintained. Spray gun cleaners used for specialty coatings shall be visually inspected for leaks and all other potential sources of leaks at least once per month, while the cleaner is in operation. The facility shall maintain a current list of all Appendix N coatings in use, showing category, and as-applied VOC content. Monthly paint logs track usage of all specialty coatings and are used to report emissions in the annual air emissions inventory report.

OAC 252:100-40 (Friable Asbestos During Demolition & Renovation Operations) [Applicable]  
The purpose of this subchapter is to control the release of friable asbestos to the ambient air during demolition and renovation operations. Tinker AFB is subject to NESHAP, 40 CFR Part 61, Subpart M.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]  
This subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Because no Area of Concern (AOC) has been designated there are no specific requirements for the facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]  
This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

OAC 252:100-47 (Municipal Solid Waste Landfills) [Not Applicable]  
The definition of such a facility means a municipal solid waste (MSW) landfill that commenced construction, modification, or reconstruction before May 30, 1991, and accepted waste after November 8, 1987. Tinker AFB has old landfills but they have not received MSW since November 8, 1987.

**SECTION IX. FEDERAL REGULATIONS**

PSD, 40 CFR Part 51

[Not Applicable to Title V Renewal]

Total facility-wide emissions of NO<sub>x</sub>, CO and VOC each exceed the threshold of 250 tpy of any single regulated pollutant. Therefore, the facility is considered a PSD-major source. However, this permit does not authorize any changes that would exceed a PSD significance threshold. Any future projects with emission increases must be evaluated for PSD if they exceed a significance level (100 TPY CO, 40 TPY NO<sub>x</sub>, 40 TPY SO<sub>2</sub>, 40 TPY VOC, 25 TPY PM, 15 TPY PM<sub>10</sub>, 0.6 TPY LEAD, and 75,000 TPY CO<sub>2e</sub>).

NSPS, 40 CFR Part 60

[Subparts A, Db, Dc, Kb, and IIII Applicable]

Any subpart that is not listed or discussed below has been determined to not apply to this facility.

Subpart A. “General Provisions” applies to this facility.

Subpart Db. “Industrial-Commercial-Institutional Steam Generating Units” applies to three units with a heat input capacity greater than 100 million Btu/hr and constructed, reconstructed or modified after June 19, 1984. Such units are considered in the section for EUGs “ExtComb-2 and ExtComb-7.” Compliance is demonstrated through CEMS monitoring and appropriate recordkeeping.

Subpart Dc. “Small Industrial-Commercial-Institutional Steam Generating Units” applies to units with a heat input capacity of between 10 and 100 million Btu/hr and constructed, reconstructed or modified after June 9, 1989. Such units are considered in the sections for EUG “ExtComb-3”, EUG “ExtComb-4”, and EUG “ExtComb-8.” Compliance is demonstrated by fuel usage and sulfur content records.

Subpart Kb. “Volatile Organic Liquid Storage Vessels” applies to tanks with a storage capacity above 75 cubic meters (m<sup>3</sup>) (19,813 gals.) and constructed after July 23, 1984. EUG “Tank-1” is subject to this subpart.

Subpart IIII. “Stationary Compression Ignition Internal Combustion Engines (CI ICE)” was published in the *Federal Register* as a final rule on July 11, 2006, with an effective date of September 1, 2006. The rule has phased-in requirements by date. For owners and operators the date that construction commences is the date the engine is ordered by the owner or operator. Applicability dates for owners and operators of stationary CI ICE are units that commence construction (ordered) after July 11, 2005, where the engine is manufactured after April 1, 2006. CI ICE modified or reconstructed after July 11, 2005, are also affected sources. The rule includes engines of all horsepower; however, emission standards vary by power rating. The rule has a greater impact on manufacturers than owners and operators. Temporary units on-site are exempted under the referenced definitions in §60.4219. These engines do not meet the definition of stationary internal combustion engines because they are not a non-road engine, thus they are not subject to this Subpart IIII. This rule will apply if permanent units are installed. Tinker AFB will comply with this rule.

The EPA revised requirements under 40 CFR 63 Subpart ZZZZ in the final rule promulgated on

January 18, 2008. That rule affects RICE units regardless of horsepower and establishes both emission limitations and operating limitations. However, the rule stated that compliance with Subpart ZZZZ for CI engines rated at less 500-bhp meet the requirements by complying with 40 CFR 60 Subpart IIII. This rule will affect future compression ignition (CI) RICE. Tinker AFB will ensure affected units comply with this rule and the permit specific conditions modified as required.

NESHAP, 40 CFR Part 61

[Subpart M Applicable]

Subpart M. “National Emission Standards for Asbestos.” The following sections are applicable to activities that may occur at Tinker AFB:

40 CFR 61.145, governing the demolition of material containing asbestos.

40 CFR 61.148, governing the use of asbestos for insulating.

40 CFR 61.150, governing the disposal of asbestos-containing material after removal or demolition.

There are no emissions of any of the other regulated pollutants: arsenic, benzene, beryllium, coke oven emissions, mercury, radionuclides, or vinyl chloride except for trace amounts of benzene. Subpart J, Equipment Leaks of Benzene, concerns only process streams that contain more than 10 percent benzene by weight. Unleaded gasoline contains no more than 5 percent by weight.

NESHAP, 40 CFR Part 63

[Subparts A, N, T, GG, JJ, and ZZZZ Applicable]

Any subpart that is not listed or discussed below has been determined not to apply to this facility.

Subpart A. “General Provisions” includes sections on topics such as circumvention, performance testing, monitoring, recordkeeping, and control devices. Sections of this subpart do apply to the facility.

Subpart N. “Chromium Electroplating and Anodizing” applies because the facility operates sources meeting the applicability criteria. Discussion of the applicable requirements is provided for EUG “Chromium-1.” Performance testing was conducted in January and June 2008 due to replacement of the scrubbers. On-going compliance is documented through submission of semi-annual reports. EUG “Chromium-2” has been retired; the facility no longer performs chromium anodizing.

Subpart T. “Halogenated Solvent Cleaning” applies because the facility operates one source that uses perchloroethylene and thus meets the applicability criteria. EU 4050, a Detrex conventional degreaser, complies with the idling emission standard in §63.464. The EU 4050 idling emission test on May 13-14, 1998, resulted in an emission rate of 0.000288 lb/ft<sup>2</sup>-hr which is less than the standard of 0.045 lb/ft<sup>2</sup>-hr of solvent/air interface area. Semi-annual reports required by this rule indicate that the unit is in compliance with the standard.

Subpart GG. “Aerospace Manufacturing and Rework Facilities” applies because the facility is at this time a major source for HAPs and performs operations meeting the applicability criteria. Discussion of the applicable requirements is presented in sections covering the specific emission

unit groups. Compliance is demonstrated by the use of compliant solvents, installation, operation, and maintenance of appropriate filters and surface coating equipment, and use of logs to track usage. Routine inspections and training are performed.

Subpart JJ. “Wood Furniture Manufacturing Operations” does apply because the facility operates sources meeting the applicability criteria. The section of this subpart that applies to the facility includes recordkeeping requirements (purchase and usage records for finishing materials or adhesives used in the manufacture of wood furniture and components), as needed to demonstrate the definition of an incidental furniture manufacturer.

Subpart ZZZZ. “Reciprocating Internal Combustion Engines (RICE),” applies to any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

Tinker operates only two types of CI RICE: leased units and emergency generators. Tinker contracts leased units during the summer months to power chillers. The leased units are exempted under the referenced definitions in §63.6585 because they meet the definition of non-road engines, they are not subject to this Subpart ZZZZ. The second category is emergency generators. Emergency CI RICE generators are subject to various requirements depending on siting (area or major sources of HAPs), date of installation (existing or new), and rated brake horsepower (at or below 500 bhp or above 500 bhp).

CI emergency generators >500 bhp:

- A new or reconstructed emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f) and §63.6590(b).
- An existing CI emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions does not have to meet the requirements of this subpart and of subpart A. No initial notification is necessary. §63.6590(b)(3).

CI emergency generators ≤500 bhp:

- A new emergency stationary RICE with a site rating of less than or equal to 500 bhp, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part. §63.6590(c).
- Existing CI RICE with a site rating of less than or equal to 500 bhp located at major sources must comply with the requirements in Table 2c. This table requires compliance with work practices including oil changes, inspection of air cleaner, and inspection of hoses and belts. §63.6602. Note that per §63.6695(a)(1), existing stationary CI RICE with a site rating less than or equal to 500 brake horsepower must comply with this subpart no later than May 3, 2013.

Specific conditions have been included under the EUGs that have engines subject to the rule. Leased units for the summer remain exempted under the referenced definitions in §63.6585.

Because these engines meet the definition of non-road engines, they are not subject to this Subpart ZZZZ.

#### **Additional MACTs**

Additional MACT standards are anticipated during the term of this permit. A brief discussion of MACTs that may apply later follows.

Subpart LLLL. The “Defense Land Systems and Miscellaneous Equipment” (DLSME) proposed regulation is expected to be published in the Federal Register in early CY 10. Based on review of the preliminary draft of the DLSME MACT, these requirements cover surface coating, depainting, solvent usage, and paint equipment cleaning for ground-based military and civilian vehicles and equipment, including aircraft ground equipment (AGE) and ground support equipment (GSE). GSE includes aircraft support equipment such as generators, air conditioning units, tugs, nitrogen gas carts, etc. The MACT also covers surface coating, cleaning or depainting of military munitions manufactured by or for the Armed Forces of the United States. It includes additional work practice standards, such as training and record keeping. Additionally, the proposed standard limits facility-wide use of methylene chloride for specific purposes.

Surface coating, cleaning, or depainting operations subject to the Aerospace Manufacturing and Rework Facilities NESHAP (subpart GG of this part), the Shipbuilding and Ship Repair NESHAP (subpart II of this part), or the Wood Furniture Manufacturing Operations MACT(subpart JJ of this part) are not subject to the DLSME MACT.

Incorporating the draft DLSME MACT requirements as specific conditions for the affected EUGs within the Title V permit renewal should preclude the need for future public notices and major modifications of the permit, saving resources, staff time, and money for both Tinker AFB and the ODEQ staff. A specific condition has been added under Section A of the facility wide requirements stating this.

Subpart MMMM. The “Miscellaneous Metal Parts and Products Surface Coatings” NESHAP promulgated on December 11, 2003, excludes surface coating of miscellaneous metal parts and products performed on-site at installations owned or operated by the United States Armed Forces per Section 63.3881(c). This operation will be addressed and specifically defined in the DLSME NESHAP.

Subpart PPPP. The “Plastic Parts Surface Coating” NESHAP promulgated August 22, 2003, excludes surface coating of plastic parts and products performed on-site at installations owned or operated by the United States Armed Forces per Section 63.4481(c). These operations will be addressed and specifically defined in the DLSME NESHAP.

Subpart DDDDD. The “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters” NESHAP was promulgated on September 13, 2004. In March 2007, the EPA filed a motion to vacate and remand this rule back to the agency. The rule was vacated by court order, subject to appeal, on June 8, 2007. No appeals were made and the rule was vacated on July 30, 2007. All requirements and references to this subpart have been removed from this permit memorandum and specific conditions.

The EPA is planning on issuing guidance (or a rule) on what actions applicants and permitting authorities should take regarding MACT determinations under either Section 112(g) or Section 112(j) for sources that were affected sources under Subpart DDDDD and other vacated MACTs. It is expected that the guidance (or rule) will establish a new timeline for submission of section 112(j) applications for vacated MACT standards. At this time, ODEQ has determined that a 112(j) determination is not needed for sources potentially subject to the vacated MACT, Subpart DDDDD. This permit may be reopened to address Section 112(j) when necessary.

Subpart GGGGG. “Site Remediation,” promulgated on October 8, 2003, exempts corrective action at RCRA sites, CERCLA remedial and non-time critical removal actions, and gasoline service station UST remediation per Sections 63.7881(a) and (b)(2)-(b)(4). Tinker AFB does not currently have any remediation subject to this regulation. If remediation projects are initiated that do not qualify for this exemption, Tinker AFB will meet and comply with the MACT.

While Tinker AFB does have operations similar to those covered by the following four subparts, none of the four are currently applicable.

Subpart WWW. “Reinforced Plastics Composites Production,” as promulgated on April 21, 2003, states that a facility is exempt if it only repairs reinforced plastic composites. Reinforced plastic composite operations at Tinker AFB are exempted under this regulation.

Subpart YYYY. “Combustion Turbines,” promulgated on March 5, 2004, only applies to stationary combustion turbines rated at one-megawatt or greater. Tinker AFB does not operate any such turbines.

Subpart EEEEE. “Iron and Steel Foundries,” promulgated in the Federal Register on April 22, 2004, defines iron and steel foundry as:

“Iron and steel foundry means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities and operations that only produce non-commercial castings are not included in this definition.”

Tinker AFB’s foundry is a low temperature foundry and will only melt “non-ferrous” material (i.e., brass, aluminum, zinc, and lead, although requirements for lead are very low). Tinker AFB does not produce any final or near final products for introduction into commerce. Commerce is defined in Webster’s dictionary as “the buying and selling of goods, especially on a large scale.” The specialty foundry does not meet this definition. Therefore, this regulation does not apply to the foundry operations at Tinker AFB.

Subpart PPPPP. “Engine Test Firing,” promulgated on May 27, 2003, states that existing sources do not have to meet the requirements of this subpart or Subpart A according to section 63.9290(b). Also, Section 63.9290(d) exempts any portion of an affected source used exclusively for testing of combustion turbine engines.

Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Not Applicable]  
CAM, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source that is required to obtain a Title V permit, if it meets all of the following criteria.

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY.

No emission units at Tinker AFB meet all of the criteria for CAM.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]  
This facility does not process or store more than the threshold quantity of any regulated substance. Although significant quantities of various fuels are stored on base, EPA published an exemption for “flammable substances used as fuel” in the Federal Register on March 13, 2000, which applies to the situation at Tinker AFB. More information on this federal program is available at the web site: <http://www.epa.gov/ceppo/>.

Stratospheric Ozone Protection, 40 CFR Part 82 [Applicable]  
This rule affects facilities, which produce, consume, import, or export any controlled substances or controlled products as defined in this part. These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and ban the use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

Because facility personnel perform service on industrial cooling units, comfort cooling, and motor (fleet) vehicles containing Class I and II refrigerants, the facility is subject to this rule. (see Standard Conditions, Section XX).

## SECTION X. COMPLIANCE

### **Tier Classification and Public Review**

This application has been determined to be **Tier II**, based on the request for a construction (a PSD significant construction modification) permit for an existing major source facility operating under a Part 70 operating permit. The permittee submitted a landowner affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certified that the applicant owns ~4900 acres of the land and leases ~430 acres from Oklahoma County. This 50-year lease dated September 24, 2008, authorizes Tinker AFB to conduct permitted operations on the leased property.

The applicant published the “Notice of Filing a Tier II Application” in *The Oklahoman* a daily newspaper printed in Oklahoma County, on September 16, 2015. The notice stated that the application was available for public review at the Midwest City Library at 8143 East Reno, Midwest City, Oklahoma or at the Air Quality Division’s Main Office in Oklahoma City, Oklahoma.

The applicant published the “Notice of Tier II Draft Permit” in *The Oklahoman*, a daily newspaper printed in Oklahoma County, on October 1, 2015. The notice stated that the draft permit was available for public review at the Midwest City Library at 8143 East Reno, Midwest City, Oklahoma or at the Air Quality Division’s Main Office in Oklahoma City, Oklahoma.

The applicant was allowed to run public notice of Tier II draft permit concurrently with EPA review. Public notice started October 1, 2015 and ended September 1, 2015. EPA Region 6 45-day review started September 30, 2015 and ended November 15, 2015.

Information on all permit actions is available for review by the public in the Air Quality section of the ODEQ Web page: <http://www.deq.state.ok.us/>.

The facility is not located within 50 miles of the border of any state adjacent to the state of Oklahoma. Therefore, notification to the bordering states for this permit is not required.

The draft permit will also be sent to EPA for a concurrent review.

### **Fees Paid**

A permit renewal fee will be submitted by the applicant upon receipt of an invoice.

## SECTION XI. SUMMARY

Tinker AFB will continue to operate under Permit No. 2009-394-TVR issued September 2, 2010 and concurrently with Permit No. 2009-394-C (M-4) PSD when it is issued.

This facility has demonstrated the ability to comply with all Air Quality rules and regulations.



Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the modified construction permit is recommended.

## SECTION XII. APPENDICES OF EMISSION SOURCES

Table 14 contains a list of appendices attached that provide lists of significant and insignificant air emission sources.

**Table 14**

<b>APPENDICES OF EMISSION SOURCES</b>	
<b>NAME OF APPENDIX</b>	<b>APPENDIX</b>
SIGNIFICANT COMBUSTION SOURCES (Listed by EUG)	A
SIGNIFICANT NON-COMBUSTION SOURCES (Listed by EUG)	B
AGGREGATED INSIGNIFICANT SOURCES	C
NON-AGGREGATED INSIGNIFICANT SOURCES	D

**PERMIT TO CONSTRUCT  
AIR POLLUTION CONTROL FACILITY  
SPECIFIC CONDITIONS**

**TINKER AIR FORCE BASE  
MODIFY EXISTING PROCESSES  
PSD PERMIT**

**PERMIT NO. 2009-394-C (M-3) PSD**

The permittee is authorized to construct in conformance with the specifications submitted to Air Quality on August 24, 2015. The Evaluation Memorandum dated November 17, 2015, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain specific operational standards, or monitoring, reporting, and recordkeeping (MRR) requirements. Commencing construction/continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

**SECTION A. FACILITY-WIDE SPECIFIC CONDITIONS**

1. The permittee shall be authorized to operate all facility activities continuously (24 hours per day, every day of the year) unless otherwise specified.
2. The permittee shall use commercial-grade natural gas as the primary fuel in fuel-burning external combustion devices, with No. 2 fuel oil as backup fuel. The permittee is authorized to burn its existing distillate fuel oil inventory in boilers. The fuel oil is limited to a maximum of 0.3% sulfur by weight, the most restrictive NSPS Subpart Db limit for boilers constructed after February 28, 2005. All future fuel oil deliveries will contain a maximum of 0.05 wt% sulfur. Compliance shall be documented either by periodic testing of the existing fuel oil inventory or verification of future fuel oil deliveries containing a maximum sulfur content of 0.05% by weight. The following restrictions apply regarding fuel oil usage:
  - a. **Current configuration burning 0.3% wt sulfur:** Periodic testing or operation while burning fuel oil is limited to only one steam plant firing fuel oil at any time per the following conditions:
    - i. Boiler Plant 3001. All boilers (three 121 MMBtu and one 75 MMBtu) may be operated simultaneously.
    - ii. Boiler Plant 208. Only one large boiler (116 MMBtu) can be operated at maximum of 50% capacity (~400 gal/hr) or two small boilers may be operated at once.
    - iii. Boiler Plant 5802. Only one boiler (29 MMBtu) may be operated at rated heat input at a time.
    - iv. Boiler Plant 821. Only one large boiler (16.3 MMBtu) or two small boilers (5.6 MMBtu) may be operated at a time.
    - v. Boiler Plant 2212. Only one boiler (85-MMBtu) may be operated at a

b. **Planned modification with raincaps removed from steam plant 208 burning 0.05 wt % sulfur:** All boilers in all steam plants may be operated simultaneously for periodic testing or operation while burning fuel oil with a sulfur content of 0.05% by weight and with raincaps removed on the large units in building 208.

- ### Flexibility Options:

- Restrictions:

- a. The change shall meet the applicable requirements of Part 7 or Part 9 of Subchapter 8. This means that the increase in emissions from any individual change shall be less than the significance level for Prevention of Significant Deterioration (PSD) (100 tpy CO, 40 tpy NO<sub>x</sub>, 40 tpy SO<sub>2</sub>, 40 tpy VOC, etc.)
- b. The change shall not result in the creation of a new major source by itself. This means that the increase in emissions from any individual source shall not exceed the threshold of 100 tpy for any criteria pollutant or an increase of Hazardous Air Pollutant (HAP) emissions beyond the 10/25 tpy threshold.
- c. A record of such changes and the associated emissions increase shall be maintained on-site or at a local field office. The record shall be maintained for at least five years after the date of occurrence.
- d. The change shall not be considered a reconstruction of a major affected source under 40 CFR Part 63. Reconstruction means the replacement of components of an affected or previously unaffected stationary source to the extent that:
  - (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.
  - (2) It is technologically and economically feasible for the reconstructed source to

meet the relevant standard(s) established by the Administrator (or Oklahoma DEQ) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous pollutants from that source.

- e. The change shall not be considered a physical change that would be a “significant” modification under OAC 252:100-8-7.2(b)(2). Significant modification procedures shall be used for applications requesting permit modifications that:
  - (1) Involve any significant changes in existing monitoring requirements.
  - (2) Relax any reporting or recordkeeping requirements.
  - (3) Change any permit condition that is required to be based on a case-by-case determination of an emission limitation or other standard, on a source-specific determination of ambient impacts, or on a visibility or increment analysis.
  - (4) Seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement or state-only requirement which the source has assumed to avoid some other applicable requirement or state-only requirement to which the source would otherwise be subject.
  - (5) Are modifications under any provision of Title I of the Act. Such changes would be “modifications” as defined under NSPS, NESHAP, PSD, and non-attainment areas.
  - (6) Do not qualify as minor permit modifications or administrative amendments.
- 4. The permittee has requested and been granted a “permit shield” for this facility. All applicable air pollution control rules and regulations are listed in the Specific Conditions or in the Standard Conditions. Compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified and included in this permit. Rules and regulations, which have been determined inapplicable are also listed and discussed in the Evaluation Memorandum.
- 5. Emission limits for criteria pollutants contained within previously issued air quality permits have been incorporated in this renewal permit. To allow greater flexibility and simplify recordkeeping and reporting, permittee has requested emission limits be aggregated for the members of certain EUGs, or groups of EUGs. In addition, permittee has agreed to include significant sources that have operated lawfully without an applicable DEQ-issued permissible emission limit in these EUG and EUG group emission limits. The emission limits are summarized by EU, EUG, or EUG group, as appropriate, in Table 1. Annual emissions are to be calculated monthly for the twelve (12) preceding calendar months.
- 6. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility.

[OAC 252:100-8-6(d)(2)]

Regulation	Description	Notes
OAC 252:100-7	Permits For Minor Facilities	Not in source category
OAC 252: 100-11	Alternative Reduction	Not eligible
OAC 252: 100-15	Mobile Sources	Not in source category
OAC 252: 100-23	Cotton Gins	Not type of emission unit
OAC 252: 100-24	Feed & Grain Facility	Not in source category

7. The permittee shall maintain records of purchase and/or usage records of finishing materials or adhesives used in the manufacture of wood furniture and components to demonstrate that Tinker AFB operations continue to use less than 100 gallons per month, and thus continue to meet the definition of an incidental wood furniture manufacture.  
[40 CFR 63, Subpart JJ, 63.801 & 806]

8. This permit supersedes all previous Air Quality permits for this facility, which are now null and void. The two construction permits listed below have been incorporated in this Title V permit as specified in Specific Condition #11.

Permit Number	Project	Date Issued
99-104-C (M-4)	Engine Test Cells	April 25, 2007
99-104-C (M-8)	Fuel Overhaul & Repair	November 14, 2007

9. No later than 30 days after each anniversary date of the issuance of the original Title V permit (May 11, 2005), the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit.

[OAC 252:100-8-6 (c)(5)(A) & (D)]

10. Any new sources authorized under the flexibility option (specific condition 3) shall comply with applicable conditions for that EUG.  
[OAC 252:100-8]

11. Title V permit conditions apply to all air emission sources new or relocated in accordance with the specific conditions of the Title V permit or authorized to be constructed under ODEQ issued construction permits.  
[OAC 252:100-8]

12. New emission sources not authorized under the flexibility clause or qualifying as insignificant or trivial in accordance with OAC 252:100 and its appendices are subject to normal permitting requirements. A permit application must be submitted if sources that otherwise qualify under the flexibility options are installed and the potential to exceed the applicable emission limits shown in Table 1.  
[OAC 252:100-8]

13. Emissions from both the TAC and Tinker AFB Title V air emission sources shall be considered as one facility for modeling and NAAQS compliance demonstrations.  
[OAC 252:100-8]

14. No later than 30 days after each anniversary date of the issuance of the original Title V

(5/11/2005) operating permit, the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit. The following specific information for the past year is required to be included:

[OAC 252:100-8-6 (c)(5)(A) & (D)]

- a. Emission calculations (monthly and 12-month rolling total).
15. **Concurrent Permits:** Tinker AFB will continue to operate under Permit No. 2009-394-TVR issued September 2, 2010 and concurrently with Permit No. 2009-394-C (M-4) PSD when it is issued.
16. **Operating Permit:** The permittee shall apply for a modification of their current Title V Operating Permit No. 2009-394-TVR within 180 days of issuance of this permit.

**Table 1 - EU and EUG Emission Limits**

EU(s)	EUG(s)	Description	PM <sub>10</sub>	VOC	NO <sub>x</sub>	SO <sub>2</sub>	CO
			TPY	TPY	TPY	TPY	TPY
Facility Wide	CD1, CD2, CD3 (note 1)	Chemical Depainting Grouping		400.0			
Facility-wide	CF1, CH1, CH2, CS1, SV1 (note 1)	Clean Flush, Chemical Hand-Wipe, Clean Spray, and General Solvent Usage Grouping		196.0			
4416	CR1	Chromium Electroplating	(note 2)				
5015	CT1 (note 3)	Fuel Component Testing Operation: Calibration Fluid		400.0			
5415	CT1 (note 3)	Fuel Component Testing Operation: Calibration Fluid		70.0			
5417	CT1 (note 3)	Fuel Component Testing Operation: Calibration Fluid		162.0			
0081 0082 0083	EC1 (note 4, 6)	Boilers		2.63	206.36	20.0	46.23
0061	EC2 (note 3, 6)	Boiler	4.13	2.92	51.97	20.0	43.6
0062	EC2 (note 3, 6)	Boiler	4.13	2.92	51.97	20.0	43.6
0021 0022	EC3 (note 4)	Boilers	0.68	0.50	9.02	0.06	7.58
0051	EC4 (note 3, 6)	Boiler	0.69	0.45	4.28	20.0	6.98
0052	EC4 (note 3, 6)	Boiler	0.69	0.45	4.28	20.0	6.98
0065	EC4 (note 3, 6)	Boiler	2.62	2.85	21.23	20.0	27.64
0053 0054	EC5 (note 4, 6)	Boilers	1.38	0.89	8.56	20.0	13.96
0041 0042	EC6 (note 4)	Boilers	1.56	1.12	18.03	0.12	17.08
0100 0101	EC6 (note 5)	Furnaces	n/a	n/a	n/a	n/a	n/a
0063	EC7 (note 6)	Boiler	4.95	2.92	39.5	20.0	99.5
0015 0016	EC8 (note 6)	Boilers	1.14	0.70	17.88	20.0	10.34
0091	EC10	Boiler	6.12	4.43	112.7	0.48	67.6
0092	EC10	Boiler	6.12	4.43	112.7	0.48	67.6
0093	EC10 (note 7)	Boiler	3.5	1.7	55.4	5.0	26.6
0093	EC10 (note7)	Boiler	3.44	2.49	55.4	0.27	38.0
4403 4404	ET1 (Note 8)	Jet Turbine Engine Testing	40.0	218.0	414.0	48.0	277.0

4600							
None currently	HL1 (note 3)	Halogenated Solvent Batch Cold Cleaning	---	---	---	---	---
5289	IC1 (note 3)	Diesel Generators	3.0	5.0	38.0	5.0	38.0
5642	IC3 (note 3)	Diesel Generators	4.0	10.0	38.0	1.0	30.0
Facility-wide	ND1 & ND2 (note 1)	Non-Chemical Depainting	1.2				
Facility-wide	SC1, SC2, SC3, SC4, SC5, SV2, & SV3 (note 1)	Surface Coating Grouping	10.0	108.0			
8333	TK1 (note 3)	MOGAS AST, 42,000 gals		6.864			
7908 8105 8114 8115 8415 8418 8702	TK2	MOGAS ASTs		(note 2)			

## Notes:

- 1: Emission limit(s) were established for all EUs operated under the listed EUG(s), as a facility-wide aggregate.
- 2: Subject to a technology-based standard or emission rate limit. See applicable Specific Condition in CR-1.
- 3: Emission limit(s) apply only to the listed EU. HL-1 does not have emission units, but EUG retained in event a unit is installed in the future.
- 4: Emission limit(s) apply to the listed EUs, as a plant-wide aggregate.
- 5: These units do not have any limits assigned to them (see the Permit Memorandum for reasons why).
- 6: All dual fuel external combustion boilers have aggregate SO<sub>2</sub> emission limit of 20 tpy. This does not include the TAC boilers.
- 7: The first line entry for EU 0093 represent limits when firing natural gas and landfill gas; the second entry line are the limits when firing only natural gas.
- 8: This is aggregate limit for all jet engine turbine testing operations on the facility.



**SECTION B. EUG - SPECIFIC CONDITIONS****CD1, ChemDpnt-1, Aerospace Depainting - Zero HAP Stripper****Specific Conditions*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CD1-1. The permittee shall use only non-organic HAP-containing strippers in these emission units. [40 CFR 63, Subpart GG, 63.746(b)(1)]

**Emission and Limitations for Depainting Operations**

Materials	Annual VOC Emissions TPY
Non-HAP -Containing Stripper	400

- CD1-2. As BACT for VOC depainting operations, Tinker AFB will use good work practices to minimize VOC emissions in compliance with the Aerospace NESHAP VOC emission standards in 40 CFR 63, Subpart GG, as summarized in the following table. [40 CFR 63, Subpart GG, 63.746(b)(1)]

**BACT Limits for Depainting Operations**

Pollutant	Production Activity	Control Technology
VOC	Low-VOC vapor-pressure cleaning solvents and strippers.	Less than 45 mm Hg at 20°C or as specified in Table 1 of 40 CFR 63, Subpart GG.
	Solvents and stripper application	Low-pressure applicators or manual application.
	Work practice	Good work practices in compliance with Aerospace NESHAP (40 CFR 63, Subpart GG)

- CD1-3. The maximum total VOC emissions emitted from all chemical depainting buildings is 400 TPY, with an additional limit of 300 TPY maximum VOC from depaint activities applied individually at any of the following depaint building: Building 2122, Building 2280, Building 3225, Building 3228, Building 9001. [OAC 252:100-8]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CD1-4. The permittee shall insure that the HAP content is reviewed and verified periodically (at least annually). Any proposed product changes must be reviewed for compliance with this requirement. [40 CFR 63, Subpart GG, 63.746(b)(1)]
- CD1-5. The permittee shall maintain records of the name and volume for all chemical strippers used in depainting operations. [40 CFR 63, Subpart GG, 63.752(e)(1)]
- CD1-6. The permittee shall maintain a list of the parts, subassemblies and assemblies removed from the aircraft for each aircraft depainting. [40 CFR 63, Subpart GG, 63.752(e)(4)]

- CD1-7. The permittee shall submit semiannual compliance reports containing the required information regarding any new chemical strippers that are used, starting May 1, 1999.  
[40 CFR 63, Subpart GG, 63.753(d)(1)(ii)]
- CD1-8. The permittee shall report the organic HAP content of new chemical strippers semiannually.  
[40 CFR 63, Subpart GG, 63.753(d)(1)(iii)]
- CD1-9. The permittee shall report the organic HAP content for each chemical stripper that undergoes reformulation semiannually.  
[40 CFR 63, Subpart GG, 63.753(d)(1)(iv)]
- CD1-10. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-8-6 (a)(3)(B)]
- Material usage for depainting operations (monthly and 12-month rolling totals).
  - VOC emission calculations (monthly and 12-month rolling total).
  - Material Safety Data Sheets (MSDSs) for all materials used for the depainting operations showing the weight per gallon, % organic HAP by weight, and the % by weight of all toxic constituents.

**Additional Specific Conditions*****Scenario 2 (Advance approval)***

- CD1-11. The permittee is required to provide initial notification to DEQ for a newly constructed or reconstructed source that is a major source.  
[40 CFR 63, Subpart A, 5(b)]
- CD1-12. This EUG is the total of all depainting operations at the facility covered by this EUG. As such, depainting operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit.  
[40 CFR 63, Subpart GG, 63.741(c)]

<b>CD2, ChemDpnt-2, Aerospace Depainting – Spot Depainting (HAP containing)</b>
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**Specific Conditions*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CD2-1. The quantity of organic HAP-containing strippers used for each military aircraft shall be limited to 50 gallons or 365 pounds of organic HAP for spot stripping and decal removal per military aircraft depainted.  
[40 CFR 63, Subpart GG, 63.746(b)(3)]
- CD2-2. The permittee shall minimize spills while handling HAP containing waste.  
[40 CFR 63, Subpart GG, 63.748]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CD2-3. The permittee shall maintain records in accordance with 63.752(e)(6) that demonstrate, on an average annual basis that no more than 50 gallons of organic HAP containing stripper or 365 pounds of organic HAP is used per aircraft for spot stripping and decal removal. [40 CFR 63, Subpart GG, 63.752(b)(3)]
- CD2-4. The permittee shall maintain records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]
- CD2-5. The permittee must maintain records of the name and volume for all chemical strippers used in depainting operations. [40 CFR 63, Subpart GG, 63.752(e)(1)]
- CD2-6. The permittee shall maintain a list of the parts, subassemblies and assemblies removed from the aircraft for each aircraft depainting. [40 CFR 63, Subpart GG, 63.752(e)(4)]
- CD2-7. The permittee shall maintain records of the volume of HAP-containing stripper or weight of organic HAP used, annual average volume of stripper or weight of organic HAP used per aircraft and the annual number of aircraft stripped. [40 CFR 63, Subpart GG, 63.752(e)(6)]
- CD2-8. The permittee shall fulfill notification requirements in 63.9(a)-(e) and (h)-(j) as applicable and §63.10 (a), (b), (d) and (f), recordkeeping and reporting requirements. [40 CFR 63, Subpart GG, 63.753(a)(1)]
- CD2-9. The permittee shall submit semiannual compliance reports containing the required information regarding any new chemical strippers that are used, starting May 1, 1999. [40 CFR 63, Subpart GG, 63.753(d)(1)(ii)]
- CD2-10. The permittee shall report the organic HAP content of new chemical strippers semiannually. [40 CFR 63, Subpart GG, 63.753(d)(1)(iii)]
- CD2-11. The permittee shall report the organic HAP content for each chemical stripper that undergoes reformulation semiannually. [40 CFR 63, Subpart GG, 63.753(d)(1)(iv)]

**Additional Specific Conditions*****Scenario 2 (Advance approval)***

- CD2-12. The permittee is required to provide initial notification to DEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]
- CD2-13. This EUG is the total of all depainting operations at the facility covered by this EUG.

As such, depainting operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit.

[40 CFR 63, Subpart GG, 63.741(c)]

<b>CD3, ChemDpnt-3, Aerospace Depainting – Radomes and Parts</b>
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**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CD3-1. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

**Additional Specific Conditions**

***Scenario 2 (Advance approval)***

- CD3-2. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source.

[40 CFR 63, Subpart A, 5(b)]

- CD3-3. This EUG is the total of all depainting operations at the facility covered by this EUG. As such, depainting operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit.

[40 CFR 63, Subpart GG, 63.741(c)]

<b>CD4, ChemDpnt-4, Non-Aerospace Depainting Subject to the DLSME</b>
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When the DLSME NESHAP is finalized, the non-aerospace chemical depainting operations will become subject to the regulation. Some of the existing sources will be redesignated as sources under this EUG. These have been kept segregated during the transition period, with a draft list of applicable specific conditions, based on the preliminary draft NESHAP. After EPA publishes the final DLSME rule, any new depainting operations with DLSME applicability will be subject to requirements upon startup. After EPA promulgates the final rule, the specific conditions will be revised to reflect the changes, if any, in the finalized regulatory requirements from those in the proposed rule. Any changes should be minor and should not require additional public review.

**Specific Conditions**

***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

*Note: Depainting does not include removal of coating from paint application equipment, or the removal of identification markings per the definition in 40 CFR 63, Subpart LLLL, 63.3689.*

- CD4-1. Existing, new and reconstructed depainting operations at major sources that are not aerospace related depainting operations must meet the limitations specified in

§3702(b)(1) and (2) for chemical depainting operations using methylene chloride or a mixture containing methylene chloride. [40 CFR 63, Subpart LLLL, 63.3702(b)]

- CD4-2. All depainting operations combined, except for vats or dip tanks that expose 1.21 square meters (13 square feet) or more of air/chemical interface, must emit no more than 454 kg (1000 lb) of organic HAP per calendar year, as determined according to mass calculations in §63.3702(c). [40 CFR 63, Subpart LLLL, 63.3702(b)(1)]

*Note : Conditions CD4-3 thru 4-4 apply only to tanks or vats that have 1.21 square meters (13 square feet) or more of air/chemical interface and that contains methylene chloride or a methylene chloride mixture.*

- CD4-3. Each existing, new, or reconstructed vat or dip tank that exposes 1.21 square meters (13 square feet) or more of air/chemical interface and that contains methylene chloride or a methylene chloride mixture must comply with the work practice standards contained in §63.3702(d). [40 CFR 63, Subpart LLLL, 63.3702(d)]

- CD4-4. A major source that performs depainting using methylene chloride or methylene chloride-containing mixtures in vats or dip tanks that expose 1.21 square meters (13 square feet) or more of air/chemical interface, you must minimize emissions from these vats or dip tanks by implementing the following procedures:  
[40 CFR 63, Subpart LLLL, 63.3702(d)]

(1) Apply one of the following controls specified below:

(i) Employ a water layer at a minimum thickness of 2.5 centimeters (1.0 inch), or a layer of another protective material at a thickness specified by the manufacturer of the material, on the surface of the methylene chloride or methylene chloride-containing mixtures within the vat or dip tank.

(ii) Employ a tightly fitting cover that shall be closed at all times, except during parts entry and removal.

(2) Collect and store all waste methylene chloride or methylene chloride-containing mixtures in closed containers.

(3) If a flexible hose or other flushing device is used, perform flushing only within the freeboard area of the chemical depainting vat or dip tank.

(4) Drain depainted parts over the vat or dip tank for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes must be tipped or rotated while draining.

(5) Ensure that the methylene chloride or methylene chloride-containing mixture does not exceed the fill line of the vat or dip tank to maintain a freeboard ratio of 0.75 or greater.

(6) Spills of depainting chemicals shall be wiped up as quickly as is reasonably

possible.

(7) When an air- or pump-agitated methylene chloride or methylene chloride-containing mixture bath is used, ensure that the agitator is operated to produce a rolling motion of the liquid but not observable splashing against vat or dip tank walls or parts being depainted.

(8) Sponges, fabric, wood, and paper products must not be chemically depainted. Clearly post a placard over each vat or dip tank stating that no sponges, fabric, wood, or paper products are to be put in the vat or dip tank for depainting or any other purpose.

**Compliance Monitoring, Reporting and Recordkeeping**  
***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

CD4-5. Calculate the annual mass of organic HAP emissions for all chemical depainting materials that are subject to the emission limitation (All depainting operations combined, except for vats or dip tanks that expose 1.21 square meters or more of air/chemical interface) according to the procedures in §63.3702(c).  
[40 CFR 63, Subpart LLLL, 63.3702(d)(1)]

*Note : Conditions CD4-6 thru 4-14 apply only to tanks or vats that have 1.21 square meters (13 square feet) or more of air/chemical interface and that contains methylene chloride or a methylene chloride mixture.*

CD4-6. If a water layer or layer of other protective material is utilized, on a daily basis, measure the layer for proper thickness, and record the results of the inspection and whether additional water or other material was added.  
[40 CFR 63, Subpart LLLL, 63.3702(d)(1)(i)]

CD4-7. On a daily basis, inspect the covers for proper operation and record the results of the inspection and of any repairs that were made. Repairs shall be made as soon as practicable, but no later than 15 days after any damage is found. If repairs cannot be made within 15 days, the depainting material must be removed until the repair is made, or the work practice in paragraph (d)(1)(i) of this section must be implemented.  
[40 CFR 63, Subpart LLLL, 63.3702(d)(1)(ii)]

CD4-8. The closed containers may contain a device that allows pressure relief, but does not allow liquid to drain from the container.  
[40 CFR 63, Subpart LLLL, 63.3702(d)(2)]

CD4-9. Maintain a record that states whether or not each vat or dip tank is fitted with a flexible hose or other flushing device. [40 CFR 63, Subpart LLLL, 63.3702(d)(3)]

CD4-10. Ensure that all parts baskets and hoists are designed so that the parts baskets can be tipped and rotated while draining. Hoists for larger parts that are depainted without a

basket must also be designed so that large parts with blind holes or cavities can be tipped and rotated.

[40 CFR 63, Subpart LLLL, 63.3702(d)(4)]

- CD4-11. Maintain a record of the width of each vat or dip tank and a calculation of the fluid level needed to maintain freeboard ratio of 0.75. Perform a daily check and record of the fluid level in each vat or dip tank relative to the proper freeboard ratio.

[40 CFR 63, Subpart LLLL, 63.3702(d)(5)]

- CD4-12. After a spill is wiped up, the wipe rags shall be placed in covered containers for storage before disposal.

[40 CFR 63, Subpart LLLL, 63.3702(d)(6)]

- CD4-13. Perform a daily inspection and record of agitator action to ensure there is no observable splashing.

[40 CFR 63, Subpart LLLL, 63.3702(d)(7)]

- CD4-14. Clearly post a placard over each vat or dip tank stating that no sponges, fabric, wood, or paper products are to be put in the vat or dip tank for depainting or any other purpose.

[40 CFR 63, Subpart LLLL, 63.3702(d)(8)]

<b>CF1, ClnFlush-1, Aerospace Cleaning - Flush</b>
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**Specific Conditions**

***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CF1-1. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills.

[40 CFR 63, Subpart GG, 63.744(a)]

- CF1-2. The permittee shall store flush cleaning solvents in enclosed container system after each use.

[40 CFR 63, Subpart GG, 63.744(d)]

- CF1-3. The permittee shall minimize spills while handling HAP-containing waste.

[40 CFR 63, Subpart GG, 63.748]

- CF1-4. The permittee shall generate and maintain a cleaning solvent list.

[40 CFR 63, Subpart GG, 63.752(b)(1)]

- CF1-5. The permittee shall equip the units with a cover/door, operable with one hand, internal or external drainage facilities, and a label summarizing operating practices shall be attached in a conspicuous position. Clean flush units using an aqueous ( $\geq 80\%$ ) or semi-aqueous ( $\geq 60\%$ ) water as defined in §63.744 and §63.742 of the Aerospace NESHAP) for cleaning operations are not subject to this Oklahoma rule.

[OAC 252:100-39-42(a)(1)(A),(B),(C)]

**Additional Specific Conditions**

***Scenario 2 (Advance approval)***

CF1-6. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source.  
[40 CFR 63, Subpart A, 5(b)]

CF1-7 This EUG is the total of all flush cleaning operations covered by this EUG at the facility. As such, flush cleaning operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit.  
[40 CFR 63, Subpart GG, 63.741(c)]

**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

CF1-8 The permittee shall fulfill recordkeeping requirements in §63.10 (a), (b), (d) and (f) and maintain these records for a minimum of 5 years.  
[40 CFR 63, Subpart GG, 63.752(a)]

CF1-9 The permittee will supply required data for all products applied to aerospace parts.  
[40 CFR 63, Subpart GG, 63.752(b)(1)]

CF1-10 The permittee shall fulfill notification requirements in 63.9(a)-(e) and (h)-(j) as applicable and §63.10 (a), (b), (d),(f), and recordkeeping and reporting requirements. All recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A.  
[40 CFR 63, Subpart GG, 63.753(a)(1)]

CF1-11 The permittee shall submit semi-annual reports, containing the required information, every 6 months beginning May 1, 1999. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]

<b>CH1, ClnHWipe-1, Aerospace Cleaning – Hand Wipe</b>
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**Specific Conditions**

***Scenario 1 (Primary) and Scenario 3 (Advance approval)***

CH1-1. The permittee shall use only solvents that meet the requirements of Table 1 of the NESHAP regulation.  
[40 CFR 63, Subpart GG, 63.744(b)(1)]

CH1-2. The permittee shall minimize spills while handling HAP-containing waste.  
[40 CFR 63, Subpart GG, 63.748]



***Scenario 2 (Alternative Operating Scenario)***

- CH1-3. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.744(a)]
- CH1-4. The permittee shall use only solvents in these operations that have a composite vapor pressure of 45 mmHg or less. [40 CFR 63, Subpart GG, 63.744(b)(2)]
- CH1-5. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart GG, 63.748]

**Additional Specific Conditions*****Scenario 3 (Advance approval)***

- CH1-6. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]
- CH1-7. This EUG is the total of all hand wipe cleaning operations covered by this EUG at the facility. As such, hand wipe cleaning operations covered by this EUG may be added, removed, and relocated at this facility under advance approval, provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) and Scenario 3 (Advance approval)***

- CH1-8. The permittee shall use only approved cleaning solvents in these operations. Compliance will be determined using manufacturer supplied data. [40 CFR 63, Subpart GG, 63.744(b)(1)]
- CH1-9. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f). Records will be maintained a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]
- CH1-10. The permittee shall generate and maintain a cleaning solvent list. Organizations using cleaning solvents will supply required data for all products applied to aerospace parts. [40 CFR 63, Subpart GG, 63.752(b)(1)]
- CH1-11. The permittee shall ensure that records are maintained of the name, background data demonstrating that the solvent meets the compositional requirements, and annual volume used for the cleaning solvents used in these cleaning operations. [40 CFR 63, Subpart GG, 63.752(b)(2)]

- CH1-12. The permittee shall ensure that all recordkeeping and reporting are conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]
- CH1-13. The permittee shall submit semiannual reports listing instances of noncompliant solvent usage. [40 CFR 63, Subpart GG, 63.753(b)(1)(i)]
- CH1-14. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure. [40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]
- CH1-15. The permittee shall submit semiannual reports, signed by a responsible official, stating compliance. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]
- CH1-16. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

***Scenario 2 (Alternative Operating Scenario)***

- CH1-17. The permittee shall ensure that the vapor pressure of cleaning solvents will be reviewed by Environmental Management personnel to ensure that the composite vapor pressure meets the requirement. [40 CFR 63, Subpart GG, 63.744(b)(2)]
- CH1-18. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f) and maintain records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]
- CH1-19. The permittee shall generate and maintain a cleaning solvent list. The permittee will ensure that organizations using cleaning solvents will supply required data for all products applied to aerospace parts. [40 CFR 63, Subpart GG, 63.752(b)(1)]
- CH1-20. The permittee shall maintain hand-wipe cleaning usage records including vapor pressures of each cleaning solvent. [40 CFR 63, Subpart GG, 63.752(b)(3)]
- CH1-21. The permittee shall ensure that all recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]
- CH1-22. The permittee shall submit semiannual reports listing instances of noncompliant solvent usage beginning May 1, 1999. [40 CFR 63, Subpart GG, 63.753(b)(1)(i)]
- CH1-23. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure. [40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]

- CH1-24. The permittee shall submit semiannual reports, signed by a responsible official, stating compliance. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]
- CH1-25. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

<b>CH2, ClnHWipe-2, Aerospace Cleaning – Hand Wipe, Exempt</b>
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**Specific Conditions*****Scenario 1 (Primary)***

- CH2-1. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart GG, 63.748]
- CH2-2. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.744(a)]

***Scenario 2 (Advance approval)***

- CH2-3. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]
- CH2- 4. This EUG is the total of all hand wipe cleaning operations covered by this EUG at the facility. As such, hand wipe cleaning operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CH2-5. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f); and maintain records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]
- CH2-6. The permittee shall ensure that organizations using cleaning solvents will supply required data for all products applied to aerospace parts. [40 CFR 63, Subpart GG, 63.752(b)(1)]
- CH2-7. The permittee shall ensure that all recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]
- CH2-8. The permittee shall submit semiannual reports listing instances of noncompliant

- solvent usage as of May 1, 1999. [40 CFR 63, Subpart GG, 63.753(b)(1)(i)]
- CH2-9. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure. [40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]
- CH2-10. The permittee shall submit semiannual reports, signed by a responsible official, stating compliance. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]

<b>CR1, Chromium-1, Chromium Electroplating</b>
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**Specific Conditions*****Scenario 1 (Primary)***

- CR1-1. Emissions shall not exceed 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm). Initial compliance must be demonstrated by a performance test using procedures as required by §63.7 and test methods outlined in §63.344. [40 CFR 63, Subpart N, 63.342(c)(1)(i)]
- CR1-2. The permittee shall operate and maintain any source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices. [40 CFR 63, Subpart N, 63.342(f)(1)]
- CR1-3. The permittee shall make changes to the operation and maintenance plan if required by Administrator. [40 CFR 63, Subpart N, 63.342(f)(2)]
- CR1-4. The permittee shall establish site-specific operating parameters according to the procedures outlined in 63.344 (d)(2-5). [40 CFR 63, Subpart N, 63.344(d)]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary)***

- CR1-5. Ensure that monitoring of site-specific operating parameters pressure drop across packed bed scrubber/composite mesh pad [PBS/CMP] system is used to determine continuing compliance as specified in §63.343(c)(2) and §63.344(d). [40 CFR 63, Subpart N, 63.343(c)(1)(i)]
- CR1-6. The permittee shall follow procedures in 63.344(e)(1-6) to measure the outlet chromium concentration from an add-on air pollution control device used to control multiple sources. [40 CFR 63, Subpart N, 63.344(e)]
- CR1-7. The permittee shall complete recordkeeping requirements outlined in Subparts A and N on inspections and maintenance of the source. [40 CFR 63, Subpart N, 63.346(b)]
- CR1-8. The permittee shall maintain records on the inspection for the add-on air pollution control device. [40 CFR 63, Subpart N, 63.346(b)(1)]

- CR1-9. The permittee shall maintain records of all maintenance performed on the source, the add-on air pollution control device and monitoring equipment.  
[40 CFR 63, Subpart N, 63.346(b)(2)]
- CR1-10. The permittee shall maintain records of the occurrence, duration and cause of each malfunction of process, add-on air pollution control, and monitoring equipment.  
[40 CFR 63, Subpart N, 63.346(b)(3)]
- CR1-11. The permittee shall maintain records of actions taken during malfunction periods when actions are inconsistent with the operation and maintenance plan.  
[40 CFR 63, Subpart N, 63.346(b)(4)]
- CR1-12. The permittee shall maintain records necessary to demonstrate consistency with the provisions of the operation and maintenance plan.  
[40 CFR 63, Subpart N, 63.346(b)(5)]
- CR1-13. The permittee shall maintain records on the results of all performance tests.  
[40 CFR 63, Subpart N, 63.346(b)(6)]
- CR1-14. The permittee shall maintain records necessary to determine the compliance of performance tests.  
[40 CFR 63, Subpart N, 63.346(b)(7)]
- CR1-15. The permittee shall maintain records of monitoring data required by 63.346(c) used to demonstrate compliance with the standard. [40 CFR 63, Subpart N, 63.346(b)(8)]
- CR1-16. The permittee shall maintain records on the specific identification of each period of excess emissions that occurs during periods of malfunction of the process.  
[40 CFR 63, Subpart N, 63.346(b)(9)]
- CR1-17. The permittee shall maintain records on the specified identification of each period of excess emissions that occurs during periods other than malfunction of the process.  
[40 CFR 63, Subpart N, 63.346(b)(10)]
- CR1-18. The permittee shall maintain records on the total process operating time of the affected source during the reporting period. [40 CFR 63, Subpart N, 63.346(b)(11)]
- CR1-19. The permittee shall maintain records to demonstrate whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.  
[40 CFR 63, Subpart N, 63.346(b)(15)]
- CR1-20. The permittee may request to reduce the frequency of compliance status reports to semiannually if the emission limit is not exceeded for 1 year and if approved by the Administrator.  
[40 CFR 63, Subpart N, 63.347(g)(2)(i-ii)]
- CR1-21. The permittee shall revert to the quarterly frequency of reporting if the source is not

in compliance with the relevant emission limit.

[40 CFR 63, Subpart N, 63.347(g)(2)(iii)]

CR1-22. The permittee shall submit to the Administrator a summary report to document the ongoing compliance status of the source. [40 CFR 63, Subpart N, 63.347(g)(3)]

CR1-23. The permittee shall submit to the Administrator a report on the results from the monitoring device(s) used to comply with the continuous compliance monitoring required by §63.343(c). [40 CFR 63, Subpart N, 63.347(g)(3)]

<b>CS1, ClnSpray-1, Aerospace Cleaning - Spray Gun Cleaning</b>
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**Specific Conditions**

***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

CS1-1. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.744(a)]

CS1-2. The permittee shall clean spray guns using one or more of the approved methods. Repair any leaks found in monthly inspection of an enclosed system within 15 days or shutdown the system until repaired. [40 CFR 63, Subpart GG, 63.744(c)]

CS1-3. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart GG, 63.748]

CS1-4. The permittee shall report emissions of VOC solvents from cleanup of equipment used to apply coatings controlled in 252:100-37-25(a)-(d) with the emissions of solvents from the coating lines. [OAC 252:100-37-26]

**Additional Specific Conditions**

***Scenario 2 (Advance approval)***

CS1-5. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]

CS1-6. This EUG includes all aerospace spray gun cleaning operations at the facility. As such, spray gun cleaning operations may be added, removed, and relocated at this facility under advance approval, provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

**Compliance Monitoring, Reporting and Recordkeeping**  
***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CS1-7. The permittee shall ensure that spray guns used for aerospace operations are cleaned according to one of the four approved methods. All enclosed systems will be repaired within 15 days of any leak detection or shutdown until repaired. Monitoring of enclosed systems will be carried out according to 63.751(a).  
[40 CFR 63, Subpart GG, 63.744(c)]
- CS1-8. The permittee shall visually inspect each enclosed cleaner for leaks at least once per month, while system is in operation. Records of all leaks and repair actions will be maintained according to 63.752(c). The date of the inspection shall also be recorded.  
[OAC 252:100-43; 40 CFR 63, Subpart GG, 63.751(a)]
- CS1-9. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f); and maintain records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]
- CS1-10. The permittee shall ensure that organizations using cleaning solvents will supply required data for all products applied to aerospace parts.  
[40 CFR 63, Subpart GG, 63.752(b)(1)]
- CS1-11. The permittee shall maintain records of all leaks from enclosed spray gun cleaners that include source identity, dates of leak discovery and repair.  
[40 CFR 63, Subpart GG, 63.752(b)(5)]
- CS1-12. The permittee shall ensure that all recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]
- CS1-13. The permittee shall ensure that all notification requirements are met.  
[40 CFR 63, Subpart GG, 63.753(a)(1)]
- CS1-14. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure.  
[40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]
- CS1-15. The permittee shall submit semiannual reports, signed by an official, stating compliance.  
[40 CFR 63, Subpart GG, 63.753(b)(1)(v)]
- CS1-16. The permittee shall conduct emissions inventories for this section that are consistent with the requirements of 252:100-37-25(a)-(d). [OAC 252:100-37-26]
- CS1-17. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants.  
[OAC 252:100-5]

**CS2, ClnSpray-2, DLSME Spray Gun Cleaning**

When the DLSME NESHAP is finalized, the spray gun cleaning associated with affected coating operations will become subject to the regulations. A draft list of applicable specific conditions, based on the preliminary draft NESHAP, has been developed. After EPA publishes the final DLSME NESHAP, any new spray gun cleaning with DLSME applicability will be subject to requirements upon startup. After EPA promulgates the final rule, the draft specific conditions will be revised to reflect the changes, if any, in the finalized regulatory requirements from those in the proposed rule. Any changes should be minor and not require additional public review.

**Specific Conditions*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CS2-1. The permittee shall clean spray guns using one or more of the approved methods. Repair any leaks found in an enclosed system within 15 calendar days or shutdown the system until repaired. [40 CFR 63, Subpart LLLL, 63.3701(b)(1)]
- CS2-2. The permittee must maintain records identifying the organic HAP-containing cleaning materials used for paint application equipment cleaning operations, and records of any leaks discovered from enclosed spray gun cleaning systems, the date any such leak was discovered and the date the leak was repaired. [40 CFR 63, Subpart LLLL, 63.3730(g)]
- CS2-3. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart LLLL, 63.3701(a)(2)]
- CS2-4. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]
- CS2-5. This EUG is the total of all DLSME spray gun cleaning operations at the facility. As such, spray gun cleaning operations may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit. [OAC 252:100-8]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- CS2-6. The permittee shall ensure that spray guns used for coating operations are cleaned either by using organic HAP-free cleaning materials or methods, or according to one of the four approved methods listed when organic HAP cleaning materials are used. All enclosed systems will be repaired within 15 days of any leak detection or shutdown until repaired. Monitoring of enclosed systems will be carried out according to 63.3701(b). [40 CFR 63, Subpart LLLL, 63.3701(b)]
- CS2-7. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f);



and maintain records for a minimum of 5 years.

[40 CFR 63, Subpart LLLL, 63.3787(b)]

- CS2-8. Records of all leaks and repair actions will be maintained according to 63.3730(g).  
40 CFR 63, Subpart LLLL, 63.3730(g)]
- CS2-9. If there was a deviation from the work practice standards in §63.3701(b) regarding paint application cleaning equipment, the semiannual compliance report must contain the following information:  
(i) A description of each instance of a noncompliant work practice.  
(ii) A statement of the cause of each deviation.  
(iii) A description of the actions taken to correct the deviation.  
[40 CFR 63, Subpart LLLL, 63.3720(h)]
- CS2-10. The permittee shall ensure that all recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A, Table 2. [40 CFR 63, Subpart LLLL, Table 2]
- CS2-11. The permittee shall submit all notifications, reports, and records required under §63.3710. These include notifications required by Subpart A, initial notifications, and notifications of compliance status. [40 CFR 63, Subpart LLLL, 63.3710]

<b>CT1, CalTest-1, Calibration Fluid Test Stands</b>
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**Specific Conditions**

*Scenario 1 (Primary) and Scenario 2 (Advance approval)*

- CT1-1. Alternative products may be used which have equal or less solvent content and toxicity as the calibration fluid. The permittee shall notify Air Quality of any change in the quantity and types of products used at the facility that will increase the emission rate of any solvent. This notification shall be made in writing at least 7 days prior to the change and may, at the discretion of Air Quality, require permit modification.  
[OAC 252:100-8-6(f)]
- CT1-2. The permittee shall notify the ODEQ of completion of construction of building 3907 and relocation of equipment from building 3108. This notification shall be prior to operation of test stands in the facility.  
[OAC 252:100-8-6]
- CT1-3. When building 3907 becomes fully operational, the EU 5015 emission limit will be null and void.  
[OAC 252:100-8-6]

**Compliance Monitoring, Reporting and Recordkeeping**

*Scenario 1 (Primary) and Scenario 2 (Advance approval)*

- CT1-4. The permittee shall keep records of operations as listed below. These records shall be retained on-site for a period of at least five years and shall be made available to regulatory personnel upon request.  
[OAC 252:100-8-6(a)(1)]

- a. Calibration fluid purchases and waste shipments (monthly and 12-month rolling total).
- b. Current MSD sheet for calibration fluid.
- c. Mass balance and emission calculations demonstrating compliance with Table 1 (monthly and 12-month rolling total).

**EC1, ExtComb-1, Dual-Fuel Boilers, > 10 MMBtu/hr and < 100 MMBtu/hr, Not Subject to NSPS****Specific Conditions*****Scenario 1 (Primary) – Natural Gas***

- EC1-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- EC1-2. The permittee shall not allow SO<sub>2</sub> emissions from new gas fuel-burning equipment to exceed 0.2 lbs/MMBtu, three hour average. [OAC 252:100-31-25]
- EC1-3. The permittee shall not allow NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Natural Gas***

- EC1-4. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]
- EC1-5. Compliance with the three-hour 0.2 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by either a stack test or manufacturer's guarantee. [OAC 252:100-8-6(a)(1)]

**Specific Conditions*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC1-6. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- EC1-7. The permittee shall not allow SO<sub>2</sub> emissions from new fuel oil fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]
- EC1-8. The permittee shall not allow NO<sub>x</sub> emissions from fuel oil fired equipment to exceed 0.3 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

**Monitoring, Reporting and Recordkeeping*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC1-9. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Observations shall be performed annually. [OAC 252:100-25]
- EC1-10. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]
- EC1-11. Compliance with the three-hour 0.3 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by conducting a stack test, manufacturer guarantee, or AP-42. [OAC 252:100-8-6(a)(1)]

**EC2, ExtComb-2, Dual-Fuel Boilers, > 100 MMBtu/hr, Subject to NSPS Subpart Db****Specific Conditions*****Scenario 1 (Primary) – Natural Gas and Scenario 3 (Advance approval)***

- EC2-1. The permittee shall not allow emissions to exceed 0.1 lb/MMBtu as determined by a NO<sub>x</sub> Continuous Emission Monitoring System (CEMS) on a 30-day rolling average. Continued compliance with NO<sub>x</sub> standards shall be demonstrated by CEMS. (Note: Installation and performance testing of CEMS systems was conducted on all affected boilers by 1/30/97). [40 CFR 60, Subpart Db, 60.44b(a),(i)]
- EC2-2. The permittee shall install, calibrate, and operate the CEMS for measuring NO<sub>x</sub> emissions. CEMS shall be operated continuously except during times of breakdown and repairs. [40 CFR 60, Subpart Db, 60.48b(b),(c)]
- EC2-3. The CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems are in continuous operation, except during zero and span adjustments. [40 CFR 60, Subpart A, 60.13]
- EC2-4. The CEMS shall be installed such that representative emissions are obtained. Proper procedures have been used to determine the appropriate location of the system. The method for determining relative accuracy of continuous monitoring system shall be documented. [40 CFR 60, Subpart A, 60.13]
- EC2-5. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment. [40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]
- EC2-6. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating

in MMBtu/hr.

[OAC 252:100-19]

- EC2-7. The permittee shall not allow NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

**Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary) – Natural Gas and Scenario 3 (Advance approval)***

- EC2-8. The permittee shall provide initial notification of performance test data for NO<sub>x</sub> and performance evaluation of CEMS, which shall be submitted to Oklahoma DEQ.  
[40 CFR 60, Subpart Db, 60.49b(a),(b)]
- EC2-9. The permittee shall maintain records of the daily amounts of natural gas burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month.  
[40 CFR 60, Subpart Db, 60.49b(d)]
- EC2-10. The permittee shall maintain records of NO<sub>x</sub> emissions and submit quarterly reports of CEMS NO<sub>x</sub> emission data as specified in 60.49(b).  
[40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]
- EC2-11. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports.  
[40 CFR 60, Subpart A, 60.7]
- EC2-12. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative performance, and documentation on performance test date and notification.  
[40 CFR 60, Subpart A, 60.8(a)-(d)]
- EC2-13. Compliance with the three-hour 0.2 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by either the annual RATA or stack test.  
[OAC 252:100-8-6(a)(1)]

**Specific Conditions**

***Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC2-14. The permittee shall not allow emissions to exceed 0.1 lbs/MMBtu as determined by a NO<sub>x</sub> continuous emission monitoring system (CEMS) on a 30-day rolling average. Installation and performance testing of CEMS systems was conducted on all affected boilers by 1/30/97. Continued compliance with NO<sub>x</sub> standards shall be demonstrated by CEMS.  
[40 CFR 60, Subpart Db, 60.44b(a),(i)]
- EC2-15. The permittee shall install, calibrate, and operate the CEMS for measuring NO<sub>x</sub> emissions. CEMS shall be operated continuously except during times of breakdown and repairs.  
[40 CFR 60, Subpart Db, 60.48b(b),(c)]

- EC2-16. The permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.  
[40 CFR 60, Subpart Db, 60.43b(f)]
- EC2-17. CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems are in continuous operation, except during zero and span adjustments.  
[40 CFR 60, Subpart A, 60.13]
- EC2-18. CEMS shall be installed such that representative emissions are obtained and proper procedures have been used to determine the appropriate location of the system. The method for determining relative accuracy of continuous monitoring system shall be documented.  
[40 CFR 60, Subpart A, 60.13]
- EC2-19. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment.  
[40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]
- EC2-20. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr.  
[OAC 252:100-19]
- EC2-21. The permittee shall not allow SO<sub>2</sub> emissions from fuel oil fired equipment to exceed 0.8 lbs/MMBtu heat input, three-hour average.  
[OAC 252:100-31-25]
- EC2-22. The permittee shall not allow NO<sub>x</sub> emissions from fuel oil fired equipment to exceed 0.3 lbs/MMBtu heat input, three-hour average.  
[OAC 252:100-33-2]

**Monitoring, Reporting and Recordkeeping*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC2-23. The permittee shall provide initial notification of performance test data for NO<sub>x</sub>, and performance evaluation of CEMS shall be submitted to Oklahoma DEQ.  
[40 CFR 60, Subpart Db, 60.49b(a),(b)]
- EC2-24. The permittee shall maintain records of the daily amounts of fuel burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month.  
[40 CFR 60, Subpart Db, 60.49b(d)]
- EC2-25. The permittee shall maintain records of NO<sub>x</sub> emissions and submit quarterly reports of CEMS NO<sub>x</sub> emission data as specified in 60.49(b).  
[40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]

- EC2-26. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]
- EC2-27. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]
- EC2-28. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative performance and documentation on performance test date and notification. [40 CFR 60, Subpart A, 60.8(a)-(d)]
- EC2-29. The permittee shall use very low sulfur fuel oil (< 0.5 wt%) and demonstrate that it meets this definition by maintaining fuel receipts. Quarterly reports shall be submitted. [40 CFR 60, Subpart Db, 60.42b(j), 60.47b(f), 60.49b(r)]
- EC2-30. The permittee shall conduct performance testing to verify emission standards set forth in this permit and it will be conducted using promulgated federal testing procedures. [OAC 252:100-43]
- EC2-31. Compliance with the three-hour 0.3 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by conducting a stack test, manufacturer guarantee, or AP-42. [OAC 252:100-8-6(a)(1)]

<b>EC3, ExtComb-3, Natural Gas External Combustion &gt; 10 MMBtu/hr, Subject to NSPS Subpart Dc</b>
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This EUG does not currently contain any sources; however, this EUG is retained in the event Tinker AFB installs sources subject to these criteria in the future.

**Specific Conditions**

***Scenario 1 (Primary) – Natural Gas***

- EC3-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- EC3-2. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]
- EC3-3. The permittee shall not allow NO<sub>x</sub> emissions from fuel oil-fired equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Natural Gas***

- EC3-4. The permittee shall record and maintain records of the amounts of natural gas combusted per day. All required records shall be kept for a minimum period of 2 years. [40 CFR 60, Subpart Dc, 60.48c(g),(i)]
- EC3-5. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reporting. [40 CFR 60, Subpart A, 60.7]

**EC4, ExtComb-4, Dual-Fuel Boilers, > 10 MMBtu/hr, Subject to NSPS Subpart Dc****Specific Conditions*****Scenario 1 (Primary) – Natural Gas***

- EC4-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- EC4-2. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]
- EC4-3. The permittee shall not allow NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Natural Gas***

- EC4-4. The permittee shall record and maintain monthly records of the amounts of natural gas combusted. [40 CFR 60, Subpart Dc, 60.48c(g),(i)]
- EC4-5. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

**Specific Conditions*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC4-6. Compliance with the three-hour 0.3 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by either a stack test or manufacturer's guarantee. [OAC 252:100-8-6(a)(1)]
- EC4-7. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating

in MMBtu/hr. [OAC 252:100-19]

EC4-8. The permittee shall not allow SO<sub>2</sub> emissions from fuel oil fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC4-9. The permittee shall not allow emissions to result in an opacity of a shade or density of 20% or greater except during short term occurrences, which is no more than one 6-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. The average of any 6-minute period shall not exceed 60% opacity. This condition applies to EUs 0051 and 0052. [OAC 252:100-25]

EC4-10. The permittee shall not allow emissions to result in an opacity of a shade or density greater than 20% (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. This condition applies only to EU 0065.  
[40 CFR 60, Subpart Dc, 60.43c(c)]

EC4-11. The permittee shall not allow NO<sub>x</sub> emissions from fuel oil-fired equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]

EC4-12. The permittee shall use very low sulfur fuel oil (< 0.5 wt%) and demonstrate that it meets this definition by obtaining and maintaining records of fuel certifications from suppliers. The fuel oil sulfur limits apply at all times, including periods of start-up, shutdown and malfunction. [40 CFR 60, Subpart Dc, 60.42c(d),(h),(i)]

#### **Monitoring, Reporting and Recordkeeping**

##### ***Scenario 2 (Alternate) – Diesel Fuel No. 2***

EC4-13. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]

EC4-14. The permittee shall record and maintain monthly records of the amounts of fuel combusted, and all the fuel capacity factor calculations.  
[40 CFR 60, Subpart Dc, 60.48c(g),(h)]

EC4-15. The permittee shall submit quarterly reports which include records of fuel supplier certifications and a signed statement that the records represent all of the fuel combusted during that quarter. Fuel supplier certification shall include the name of the oil supplier along with a statement that the oil complies with the specifications for distillate oil for fuel oil No. 1 or 2 according to ASTM D396-78.  
[40 CFR 60, Subpart Dc, 60.48c(d),(e),(f),(i)]

EC4-16. Compliance with the three-hour 0.3 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by conducting a stack test, manufacturer guarantee, or AP-42.  
[OAC 252:100-8-6(a)(1)]



- EC4-17. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

<b>EC5, ExtComb-5, Dual-Fuel Boilers, Less Than 10 MMBtu/hr</b>
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**Specific Conditions*****Scenario 1 (Primary) – Natural Gas***

- EC5-1. The permittee shall not allow particulate matter emissions to exceed 0.6 lbs/MMBtu heat input per Appendix C of OAC 252:100. [OAC 252:100-19]
- EC5-2. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Natural Gas***

- EC5-3. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]

**Specific Conditions*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC5-4. The permittee shall not allow particulate matter emissions to exceed 0.6 lbs/MMBtu heat input per Appendix C of OAC 252:100. [OAC 252:100-19]
- EC5-5. The permittee shall not allow SO<sub>2</sub> emissions from fuel oil-fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

**Monitoring, Reporting and Recordkeeping*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC5-6. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]
- EC5-7. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]

**EC6, ExtComb-6, Natural Gas External Combustion Units > 5 MMBtu/hr Not Subject to NSPS****Specific Conditions*****Scenario 1 (Primary) – Natural Gas***

- EC6-1. For EUs 0041 and 0042, the permittee shall not allow particulate matter emissions to exceed 0.6 lbs/MMBtu heat input per Appendix C of OAC 252:100. [OAC 252:100-19]
- EC6-2. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Natural Gas***

- EC6-3. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]

**EC7, ExtComb-7, Dual-Fuel Boilers > 100 MMBtu/hr, Subject to NSPS Subpart Db****Specific Conditions*****Scenario 1 (Primary) – Natural Gas***

- EC7-1. The permittee shall not allow emissions to exceed 0.2 lbs/MMBtu as determined by a NO<sub>x</sub> Continuous Emission Monitoring System (CEMS) on a 30-day rolling average. Continued compliance with NO<sub>x</sub> standards shall be demonstrated by CEMS. [40 CFR 60, Subpart Db, 60.44b(a),(i)]
- EC7-2. The permittee shall install, calibrate, and operate the CEMS for measuring NO<sub>x</sub> emissions. CEMS shall be operated continuously except during times of breakdown and repairs. [40 CFR 60, Subpart Db, 60.48b(b),(c)]
- EC7-3. The CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems are in continuous operation, except during zero and span adjustments. [40 CFR 60, Subpart A, 60.13]
- EC7-4. The CEMS shall be installed such that representative emissions are obtained. Proper procedures have been used to determine the appropriate location of the system. The method for determining relative accuracy of continuous monitoring system shall be documented. [40 CFR 60, Subpart A, 60.13]
- EC7-5. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment.

[40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]

- EC7-6. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- EC7-7. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]
- EC7-8. The permittee shall not allow NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

**Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary) – Natural Gas***

- EC7-9. The permittee shall provide initial notification of performance test data for NO<sub>x</sub> and performance evaluation of CEMS, which shall be submitted to Oklahoma DEQ. [40 CFR 60, Subpart Db, 60.49b(a),(b)]
- EC7-10. The permittee shall maintain records of the daily amounts of natural gas burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month. [40 CFR 60, Subpart Db, 60.49b(d)]
- EC7-11. The permittee shall maintain records of NO<sub>x</sub> emissions and submit quarterly reports of CEMS NO<sub>x</sub> emission data as specified in 60.49(b). [40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]
- EC7-12. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]
- EC7-13. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative performance, and documentation of performance test date and notification. [40 CFR 60, Subpart A, 60.8(a)-(d)]
- EC7-14. Compliance with the three-hour 0.2 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by either a RATA, stack test or manufacturer's guarantee. [OAC 252:100-8-6(a)(1)]

**Specific Conditions**

***Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC7-15. The permittee shall not allow NO<sub>x</sub> emissions to exceed 0.20 lbs/MMBtu as determined by a NO<sub>x</sub> continuous emission monitoring system (CEMS) on a 30-day rolling

average. Compliance with NO<sub>x</sub> standards shall be demonstrated by CEMS.

[40 CFR 60, Subpart Db, 60.44b(a),(i)]

- EC7-16. The permittee shall install, calibrate, and operate the CEMS for measuring NO<sub>x</sub> emissions. CEMS shall be operated continuously except during times of breakdown and repairs.

[40 CFR 60, Subpart Db, 60.48b(b),(c)]

- EC7-17. The permittee shall not allow emissions to result in an opacity of a shade or density greater than 20% (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

[40 CFR 60, Subpart Db, 60.43b(f)]

- EC7-18. CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems shall be in continuous operation, except during zero and span adjustments.

[40 CFR 60, Subpart A, 60.13]

- EC7-19. CEMS shall be installed such that representative emissions are obtained and proper procedures have been used to determine the appropriate location of the system. The method for determining relative accuracy of continuous monitoring system shall be documented.

[40 CFR 60, Subpart A, 60.13]

- EC7-20. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment.

[40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]

- EC7-21. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr.

[OAC 252:100-19]

- EC7-22. The permittee shall not allow SO<sub>2</sub> emissions from fuel oil-fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average.

[OAC 252:100-31-25]

- EC7-23. The permittee shall not allow NO<sub>x</sub> emissions from fuel oil-fired equipment to exceed 0.3 lbs/MMBtu heat input, three-hour average.

[OAC 252:100-33-2]

### **Monitoring, Reporting and Recordkeeping**

#### ***Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC7-24. The permittee shall provide initial notification of performance test data for NO<sub>x</sub> and performance evaluation of CEMS shall be submitted to Oklahoma DEQ.

[40 CFR 60, Subpart Db, 60.49b(a),(b)]

- EC7-25. The permittee shall maintain records of the daily amounts of fuel burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month.

[40 CFR 60, Subpart Db, 60.49b(d)]

- EC7-26. The permittee shall maintain records of NO<sub>x</sub> emissions and submit quarterly reports of CEMS NO<sub>x</sub> emission data as specified in 60.49(b).  
[40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]
- EC7-27. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually).  
[OAC 252:100-25]
- EC7-28. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports  
[40 CFR 60, Subpart A, 60.7]
- EC7-29. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative performance and documentation on performance test date and notification.  
[40 CFR 60, Subpart A, 60.8(a)-(d)]
- EC7-30. The permittee shall use very low sulfur fuel oil (< 0.3 wt%) and demonstrate that it meets this definition by maintaining fuel receipts. Quarterly reports shall be submitted.  
[40 CFR 60, Subpart Db, 60.42b(j), 60.47b(f), 60.49b(r)]
- EC7-31. Compliance with the three-hour 0.3 lb/MMBtu NO<sub>x</sub> standard in OAC 252:100-33 shall be confirmed by conducting a stack test, manufacturer guarantee, or AP-42.  
[OAC 252:100-8-6(a)(1)]
- EC7-32. The permittee shall conduct performance testing to verify emission standards set forth in this permit, and tests will be conducted using promulgated federal testing procedures.  
[OAC 252:100-43]

<b>EC8, ExtComb-8, Boilers &gt; 10 MMBtu/hr and &lt; 100 MMBtu/hr Subject to NSPS Subpart Dc</b>
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**Specific Conditions*****Scenario 1 (Primary) – Natural Gas***

- EC8-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr.  
[OAC 252:100-19]
- EC8-2. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average.  
[OAC 252:100-31-25]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Natural Gas***

- EC8-3. The permittee shall record and maintain monthly records of the amounts of natural gas combusted. [40 CFR 60, Subpart Dc, 60.48c(g),(i)]
- EC8-4. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

**Specific Conditions*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC8-5. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- EC8-6. The permittee shall not allow SO<sub>2</sub> emissions from fuel oil-fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]
- EC8-7. The permittee shall not allow emissions to result in an opacity of a shade or density greater than 20% (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60, Subpart Dc, 60.43c(c)]
- EC8-8. The permittee shall not allow NO<sub>x</sub> emissions from fuel oil-fired equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]
- EC8-9. The permittee shall use very low sulfur fuel oil (< 0.5 wt%) and demonstrate that it meets this definition by obtaining and maintaining records of fuel certifications from suppliers. The fuel oil sulfur limits apply at all times, including periods of start-up, shutdown and malfunction. [40 CFR 60, Subpart Dc, 60.42c(d),(h),(i)]

**Monitoring, Reporting and Recordkeeping*****Scenario 2 (Alternate) – Diesel Fuel No. 2***

- EC8-10. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]
- EC8-11. The permittee shall record and maintain monthly records of the amounts of fuel combusted, and all the fuel capacity factor calculations. *EUs 0015 and 0016 require only monthly fuel usage records.* [40 CFR 60, Subpart Dc, 60.48c(g),(h)]
- EC8-12. The permittee shall submit quarterly reports which include records of fuel supplier certifications and a signed statement that the records represent all of the fuel combusted during that quarter. Fuel supplier certification shall include the name of the oil supplier along with a statement that the oil complies with the specifications for distillate oil for fuel oil No. 1 or 2 according to ASTM D396-78.

[40 CFR 60, Subpart Dc, 60.48c(d),(e),(f),(i)]

- EC8-13. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports [40 CFR 60, Subpart A, 60.7]

**EC9, ExtComb-9, Dual-Fuel Boilers, Grandfathered**

EU	Description	Date of Installation	Location
0011	Boiler, Natural Gas, No. 2 Fuel Oil, 116 MMBtu/hr	1942	Bldg 208, Boiler Plant
0012	Boiler, Natural Gas, No. 2 Fuel Oil, 116 MMBtu/hr	1942	Bldg 208, Boiler Plant
0013	Boiler, Natural Gas, No. 2 Fuel Oil, 116 MMBtu/hr	1942	Bldg 208, Boiler Plant
0014	Boiler, Natural Gas, No. 2 Fuel Oil, 116 MMBtu/hr	1942	Bldg 208, Boiler Plant
0031	Boiler, Natural Gas, No. 2 Fuel Oil, 29 MMBtu/hr	1958	Bldg 5802, North Side, West
0032	Boiler, Natural Gas, No. 2 Fuel Oil, 29 MMBtu/hr	1958	Bldg 5802, North Side, East

Note: These units are listed only for tracking purposes. There are no emission limits for these grandfathered units.

**EC10, ExtComb-10, Dual-Fuel Boilers > 100 MMBtu/hr, not subject to NSPS****Specific Conditions*****Scenario 1 (Primary) – Natural Gas***

- EC10-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- EC10-2. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]
- EC10-3. The permittee shall not allow NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]
- EC10-4. The NO<sub>x</sub> emissions from Boiler #3 (EU 0093) shall be limited to 55.4 tons per 12-month rolling period. [OAC 252:100-8-6(a)(1)]
- EC10-5. Each emission unit at the facility (EUs 0091 through 0093) shall have a permanent identification plate attached which shows the make, model number, and serial number. [OAC 252:100-43]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Natural Gas***

- EC10-6. Compliance with the 55.4 tons NO<sub>x</sub> limit per 12-month rolling period shall be based on limiting the NO<sub>x</sub> emissions from Boiler #3 to 0.12 lbs/MMBtu and limiting the heat input to 923,333 million BTUs per 12-month rolling period.  
[OAC 252:100-8-6(a)(1)]
- EC10-7. The permittee shall record the total natural gas usage for each boiler. The permittee shall record the operating hours of each boiler. Compliance with the Heat Input cap shall be based on monthly fuel usage.  
[OAC 252:100-8-6(a)(1)]
- EC10-8. Compliance limiting NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average can be determined a stack test, manufacturer guarantee, or AP-42 emission factors.  
[OAC 252:100-8-6(a)(1)]
- EC10-9. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request.
- Total natural gas usage for each boiler (annually).
  - Total operating hours for each boiler (annually).
  - Operation, maintenance, and inspection log for EUs 0091 through 0093.
  - The heat input of EU 0093 (MMBtu, monthly, 12-month rolling total).  
[OAC 252:100-8-6 (a)(3)(B)]
- EC10-10. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory.  
[OAC 252:100-5]

**Specific Conditions*****Scenario 2 (Alternate) – Natural Gas in EUs 0091 and 0092; Natural Gas and Landfill Gas in EU 0093***

- EC10-11. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr.  
[OAC 252:100-19]
- EC10-12. The permittee shall not allow SO<sub>2</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average.  
[OAC 252:100-31-25]
- EC10-13. The permittee shall not allow NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average.  
[OAC 252:100-33-2]
- EC10-14. The NO<sub>x</sub> emissions from Boiler #3 (EU 0093) shall be limited to 55.4 tons per 12-month rolling period.  
[OAC 252:100-8-6(a)(1)]



**Monitoring, Reporting and Recordkeeping*****Scenario 2 (Alternate) – Natural Gas in EU0091 and 0092; Natural Gas and Landfill Gas in EU 0093***

EC10-15. Compliance with the 55.4 tons NO<sub>x</sub> limit per 12-month rolling period shall be based on limiting the NO<sub>x</sub> emissions from Boiler #3 to 0.12 lbs/MMBtu and limiting the heat input to 923,333 million BTUs per 12-month rolling period.

[OAC 252:100-8-6(a)(1)]

EC10-16. The permittee shall record the total natural gas and/or landfill gas usage for each boiler. The permittee shall record the operating hours of each boiler. Compliance with the Heat Input cap shall be based on monthly fuel usage, and monthly heat content of landfill gas. The heat content of landfill gas shall be based on monthly fuel analysis.

[OAC 252:100-8-6(a)(1)]

EC10-17. Compliance limiting NO<sub>x</sub> emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average can be determined by a stack test, manufacturer guarantee, or AP-42 emission factors.

[OAC 252:100-8-6(a)(1)]

EC10-18. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request.

- a. Total natural gas and/or landfill gas usage for each boiler (annually).
- b. Total operating hours for each boiler (annually).
- c. Operation, maintenance, and inspection log for EUs 0091 through 0093.
- d. The heat input of EU 0093 (MMBtu, monthly, 12-month rolling total).

[OAC 252:100-8-6 (a)(3)(B)]

EC10-19. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory.

[OAC 252:100-5]

<b>ET1, EngTest-1, Jet Engine Turbine Testing</b>
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This EUG includes all existing and future modifications for engine test cell operations as listed in the specific conditions below.

**Specific Conditions**

ET1-1. The permittee shall be authorized to construct additional engine test stands subject the following conditions:

- a. The permittee shall notify the ODEQ of the proposed number and location (e.g. building number), prior to beginning construction.
- b. The permittee shall notify the ODEQ when each unit becomes operational.

- c. Emissions from any additional testing units are limited to aggregated emission limits in Table 1 of the Specific Conditions for all jet engine testing operations.  
[OAC 252:100-8-6(a)(1)]

ET1-2. The permittee shall limit fuel combusted to JP-5/8 or Jet A/A-1 meeting Department of Defense military specifications. By doing so, no recordkeeping of sulfur content is required.  
[OAC 252:100-8-6(a)(1)]

ET1-3. Alternative fuel may be combusted provided emissions are equal or less than those from combustion of JP5/8 or Jet A/A-1. The permittee shall notify ODEQ of any change in the quantity and fuel type used at the facility that will increase the emission rate of any pollutant. This notification shall be made in writing at least 7 days prior to the change and may, at the discretion of the ODEQ/Air Quality Division, require permit modification.  
[OAC 252:100-8-6(f)]

### **Compliance Monitoring, Reporting and Recordkeeping**

ET1-4. The permittee shall keep records of operation as listed below: These records shall be retained on-site for a period of at least 5 years and shall be made available to regulatory personnel upon request.

- a. Monthly total number of test runs per engine type.
- b. Emissions calculations (monthly and 12-month rolling totals).

[OAC 252:100-8-6(a)(3)(B)]

ET1-5. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants.  
[OAC 252:100-5]

ET1-6. The permittee shall notify the ODEQ of completion of construction of the T-9 facilities. This notification shall be prior to operation of T-9 test cells.[OAC 252:100-8-6]

ET1-7. Construction of any engine test facilities other than T-9 portable test facilities require a construction permit application be submitted to the ODEQ. [OAC 252:100-8-6]

<b>HL1, Halog-1, Halogenated Solvent Batch Cold Cleaning</b>
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This EUG does not currently contain any sources; however, this EUG is retained in the event Tinker AFB installs halogenated solvent batch cold cleaning sources in the future.

### **Specific Conditions**

#### ***Scenario 1 (Primary)***

HL1-1. The permittee shall ensure that each unit is equipped with a cover and a water layer with minimum thickness of 1.0 inch. [40 CFR 63, Subpart T, 63.462(a)(1)]

HL1-2. The permittee shall ensure that the unit is equipped with: a cover/door that is operable

with one hand; internal or external drainage facilities; and a label summarizing operating practices. [OAC 252:100-39-42(a)(1)(A),(B),(C)]

- HL1-3. The permittee shall ensure that each cold cleaning unit shall be equipped with one or more of the following control devices: a freeboard ratio of 0.7 or greater; a water cover (if solvent is insoluble in and heavier than water) at a minimum thickness of 1.0 inch on the surface of the solvent within the tank; or approved equivalent. The tank shall also employ a tightly fitting cover that shall be closed at all times except during parts entry and removal. [OAC 252:100-39-42(a)(3)]

### **Compliance Monitoring, Reporting and Recordkeeping**

#### ***Scenario 1 (Primary)***

- HL1-4. The permittee shall maintain files of all reports and notifications and make available for inspection and review for at least 5 years. [40 CFR 63, Subpart A, 63.10(b)]
- HL1-5. The permittee shall ensure that control measures are maintained for each cold cleaning unit by having each unit equipped with a cover and a water layer with minimum thickness of 1.0 inch. [40 CFR 63, Subpart T, 63.462(a)(1)]
- HL1-6. The permittee shall submit new notification reports for each new unit considered for future use. [40 CFR 63, Subpart T, 63.468(a),(b)]
- HL1-7. The permittee shall ensure that the unit is equipped with: a cover/door that is operable with one hand; internal or external drainage facilities; and a label summarizing operating practices. This will be accomplished and recorded through periodic inspections (at least annually). [OAC 252:100-39-42(a)(1)(A),(B),(C)]
- HL1-8. The permittee shall ensure that freeboard ratio greater than or equal to 0.7 or use a water cover on applicable units in accordance with specified EPA requirements. [OAC 252:100-39-42(a)(3)]

<b>IC1, IntComb-1, Compression Ignition Internal Combustion Engines, &lt; 500 bhp, Non-emergency Units</b>
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The permittee is authorized to add or replace non-emergency generators rated at less than 500-bhp, subject to the applicable specific conditions for EUG IC1, per Specific Condition #3.

### **Specific Conditions**

#### ***Scenario 1 (Primary) – Diesel Fuel No. 2***

- IC1-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- IC1-2. The permittee shall not allow SO<sub>2</sub> emissions from liquid fuel-burning equipment to

exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

- IC1-3. This EUG is the total of all small diesel-fueled internal combustion engines installed and operated in referenced locations. The number, make, model, and serial number of covered engines may be changed without prior notification. No individual engine under this EUG will have a ton per year limit. These engines collectively must meet the aggregate emission limits for EUG IC1 in Table 1.

[OAC 252:100-8-6(a)(1)]

**Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary) – Diesel Fuel No. 2***

- IC1-4. Permittee shall keep records of operations as listed below.

[OAC 252:100-8-6-(a)(1)]

- a. Fuel usage per generator unit (monthly and calendar year totals).
- b. Spreadsheet of emission calculations based on fuel usage and emission data to demonstrate compliance with EUG emission limits.
- c. Hours of operation for each generator unit measured by a non-resettable hour meter.
- d. Vendor or manufacturer's emission data for each generator set.
- e. Results of testing of NO<sub>x</sub> and CO exhaust in grams/hp-hr from each engine to verify vendor's emission data.

- IC1-5. At least once each year, in July or August, the permittee shall conduct tests of NO<sub>x</sub> and CO concentration in exhaust gases from the generator engines when operating under representative conditions for the season. Testing shall be conducted using portable engine analyzers or an equivalent method approved by the ODEQ.

[OAC 252:100-8-6(a)(3)(A)]

- IC1-6. Compliance with the sulfur emission standards shall be fulfilled by using only low sulfur diesel oil (0.05 weight percent or less). [OAC 252:100-8-6(a)(1)(C)]

**For 40 CFR 60 Subpart IIII**

NOTE: The temporary units on-site are exempted under the referenced definitions in §60.4219. These engines do not meet the definition of stationary internal combustion engines because they are non-road engines, therefore they are not subject to Subpart IIII. [40 CFR60 Subpart IIII §60.4219]

The following conditions apply if engines that meet the definition of stationary source (not a non-road engine) are installed at the facility.

- IC1-7. The permittee shall ensure that pre-2007 model year engines manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005, comply with the emission standards in Table 1 of Subpart IIII.

[40 CFR60 Subpart IIII §60.4204(a)]

- IC1-8. Engines with 2007 model year and later must comply with the emission standards for new CI engines in §60.4201 for the model year 2007 and later stationary CI ICE, as applicable. [40 CFR60 Subpart IIII §60.4204(b)]
- IC1-9. Affected sources under Subpart IIII shall operate and maintain stationary CI RICE that achieve the emission standards in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60 Subpart IIII §60.4206]
- IC1-10. The permittee shall use only diesel fuel meeting the requirements specified in §60.4207. [40 CFR 60 Subpart IIII §60.4207]
- IC1-11. Engines installed shall comply with the dates specified for applicable model year engines in §60.4208. [40 CFR 60 Subpart IIII §60.4208]
- IC1-12. If the permittee installs an engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the operator when the high backpressure limit of the engine is approached. [40 CFR 60 Subpart IIII §60.4209(b)]
- IC1-13. If engines are installed which are subject to Subpart IIII emission standards, the permittee shall operate and maintain the stationary compression ignition (CI) internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator and approved by the manufacturer. [40 CFR 60 Subpart IIII §60.4211]
- IC1-14. Applicable engines under §60.4211 shall demonstrate compliance according to one of the methods listed therein. [40 CFR 60 Subpart IIII §60.4211(b)]
- IC1-15. If performance testing is required, then the permittee shall follow the methods and other procedures listed in §60.4212. [40 CFR 60 Subpart IIII §60.4211(b)(5)]
- IC1-16. If an affected unit is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the operator that the high backpressure limit of the engine is approached. [40 CFR 60 Subpart IIII §60.4214]

#### **40 CFR 63 Subpart ZZZZ**

**Note:** Temporary units leased for the summer are exempted under the referenced definitions in §63.6585. Because these engines meet the definition of non-road engines, they are not subject to Subpart ZZZZ. [40 CFR63 Subpart ZZZZ §63.6585(a)]

If in the future units are installed permanently, they will be affected sources and specific conditions listed below apply. On January 18, 2008, EPA promulgated changes to 40 CFR Subpart 63 to include requirements for RICE rated at less than 500 brake horsepower. The definitions in ZZZZ §63.6590 defined new sources less than 500-hp as those that commenced construction on or after June 12, 2006. On March 3, 2010, EPA promulgated additional changes to Subpart ZZZZ.

**New RICE** (rated at  $\leq 500$  bhp and commenced construction or reconstruction of the stationary RICE on or after June 12, 2006).

IC1-17. Compression ignition stationary RICE with a site rating equal to or less than 500 brake horsepower must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part. No further requirements apply for such engines under this part. [40 CFR 63 Subpart ZZZZ §63.6590(c)]

**Existing RICE** (rated at  $\leq 500$  bhp and commenced construction or reconstruction of the stationary RICE before June 12, 2006).

Tinker AFB does not own nor operate any existing RICE that would be subject to this rule. All CI existing units are emergency use units (generators and fire pump engines) which have their respective requirements listed under EUG IC2. Therefore, no specific conditions are shown below.

<b>IC2, IntComb-2, Stationary Reciprocating Internal Combustion Engines (RICE), Subject to 40 CFR 63 Subpart IIII and 40 CFR 63 Subpart ZZZZ, Emergency Use Engines</b>
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The permittee is authorized to add or replace emergency-use engines subject to conditions in IC2 per Specific Condition #3. This EUG includes diesel-fired (compression ignition) units only. The following conditions include the applicable changes/requirements in 40 CFR 60 (Subpart IIII) and 40 CFR 63 Subpart ZZZZ effective March 18, 2008. The proposed changes to Subpart ZZZZ published in the Federal Register on March 5, 2009, will trigger additional requirements. These requirements have been included and italicized, but will not become effective until the final rule becomes effective. After EPA promulgates the final rule, the specific conditions will be revised to reflect the changes, if any, in the regulatory requirements from those in the proposed rule.

**Specific Conditions**

***Scenario 1 (Primary) – Diesel Fuel No. 2***

***For units with a site rating greater than 500 brake horsepower:***

**40 CFR 63 SUBPART ZZZZ**

**Existing Sources (Commenced construction or reconstruction prior to Dec 19, 2002)**

IC2-1. An existing emergency stationary RICE with a site rating of more than 500 brake HP

located at a major source of HAP emissions does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

[40 CFR, Subpart ZZZZ, §63.6590(b)(3)]

**New Sources (Commenced construction or reconstruction on or after Dec 19, 2002)**

- IC2-2. A new or reconstructed emergency stationary RICE does not have to meet the requirements of this subpart and of Subpart A of this part except for the initial notification requirements of §63.6645(f). [40 CFR, Subpart ZZZZ, §63.6590(b)(1)(i)]
- IC2-3. Permittee shall submit an Initial Notification that includes the information specified in 40 CFR 63.9(b)(2)(i) through (v), and a statement that the new stationary emergency RICE covered by this EUG are subject to limited requirements pursuant to 40 CFR 63.6590(b), including a basis for the determination.  
[40 CFR 63, Subpart ZZZZ, §63.6590(b) and 63.6645(f)]
- IC2-4. Units installed prior to June 12, 2006, shall operate only during emergency situations as defined at 40 CFR 63.6675. The emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Permittee shall minimize the required testing, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. These engines may also operate an additional 50 hours per year in non-emergency situations. Only EUs 7221, 7222, 7223, and 7226 are subject to these requirements. [40 CFR 63, Subpart ZZZZ, §63.6675]
- IC2-5. Units installed on or after June 12, 2006, must comply with requirements specified in §63.6640(f). Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.  
[40 CFR 63, Subpart ZZZZ, §63.6675 & §63.6640(f)]

*For units with a site rating less than or equal to 500 brake horsepower:*

**Existing Sources (Commenced construction or reconstruction prior to June 12, 2006)**

Note that per §63.6695(a)(1), existing stationary CI RICE with a site rating less than or equal to 500 brake horsepower must comply with this subpart no later than May 3, 2013.

IC2-6. An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions must comply with the applicable work practice requirements of Table 2c as follows:

- a. Change oil and filter every 500 hours of operation or annually whichever comes first
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.

[40 CFR 63, Subpart ZZZZ, §63.6602(a)(1) and Table 2c]

IC2-7. Existing emergency stationary RICE must be equipped with a non-resettable hour meter. [§63.6625(f)]

IC2-8. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [40 CFR 63, Subpart ZZZZ, §63.6675 & §63.6640(f)]

IC2-9. Continuous compliance for existing stationary CI RICE not subject to any numerical emissions limitations must comply with the following work or management practices as follows:

- a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions, OR
- b. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent



with good air pollution control practice for minimizing emissions.

[§63.6640(a) and Table 6]

- IC2-10. Each existing stationary emergency RICE must be operated and maintained including control devices (if any) according to the manufacturer's emission-related written instructions or according to facility-specific maintenance plan which must provide for the maintenance and operation of the engine in a manner that minimizes emissions to the extent practicable. [40 CFR 63, Subpart ZZZZ, 63.6625(e)]

**New Sources (Commenced construction or reconstruction on or after to Jun 12, 2006)**

- IC2-11. Stationary RICE reconstructed or for which construction was commenced on or after June 12, 2006, are affected sources subject to 40 CFR 63, Subpart ZZZZ. [40 CFR 63, Subpart ZZZZ, §63.6590(a)]
- IC2-12. An affected source that is a new or reconstructed stationary RICE located at a major source of HAP emissions and is an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part. [40 CFR 63, Subpart ZZZZ, §63.6590(c)]

**40 CFR 60 SUBPART IIII**

*Subpart IIII applies only to new stationary compression ignition (diesel) internal combustion engines. The date that construction commences is the date that the engine is ordered by the owner or operator.*

- IC2-13. Affected sources for owners and operators of stationary CI ICE that commence construction or modification/reconstruction after July 11, 2005 where the stationary CI ICE are:
- a. Manufactured after April 1, 2006 and are not fire pump engines, or
  - b. Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006. [40 CFR 60 Subpart IIII §60.4200(a)(2) &(3)]
- IC2-14. Table 1 emission limits apply to pre-2007 model year engines that are not fire pump engines. [40 CFR 60 Subpart IIII §60.4205(a)]
- IC2-15. Owners and operators of 2007 model year and later emergency engines that are not fire pump engines must comply with the manufacturer standards specified in §60.4202 for new non-road CI engines, for all pollutants. [40 CFR 60 Subpart IIII §60.4205(b)]
- IC2-16. Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants as listed by engine size and model year.

[40 CFR 60 Subpart IIII §60.4205(c)]

- IC2-17. Affected sources under Subpart IIII shall operate and maintain stationary compression ignition internal combustion engine (CI ICE) that achieve the emission standards in §60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60 Subpart IIII §60.4206]
- IC2-18. Owners and operators shall comply with the diesel fuel standards beginning October 1, 2007, and in 40 CFR 80.510(b) beginning October 1, 2010 for nonroad diesel. [40 CFR 60 Subpart IIII §60.4207(a) & (b)]
- IC2-19. Owners and operators must comply with the monitoring requirements in Subparagraph (a) of §60.4209. This requires that the unit be equipped with a non-resettable hour meter prior to startup of the engine. If the diesel unit is equipped with a PM filter, subparagraph (b) requires the installation of a back pressure monitor with a warning system. [40 CFR 60 Subpart IIII §60.4209]
- IC2-20. Owner and operator compliance requirements in §60.4211 subparagraph (a) requires that the owner or operator operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions. Subparagraph (b) states that for pre-2007 model year engines or fire pump manufactured prior to the model years in table 3 and must comply with the emission standards in §60.4205(c) of this subpart, compliance must be demonstrated by one of five methods. Tinker AFB shall retain records to demonstrate compliance with one of the options listed therein. For model year 2007, a certified engine must be installed. Maintenance checks and readiness testing is limited to 100 hours per year per subparagraph (e). [40 CFR 60 Subpart IIII §60.4211]
- IC2-21. This section specifies testing methods and procedures for performance testing, however "certified" engines with less than 30 liter displacement do not require testing. If performance testing is required, the permittee shall follow the methods and procedures listed in this section. [40 CFR 60 Subpart IIII §60.4212]
- IC2-23. The owner or operator of an emergency stationary internal combustion engine is not required to submit an initial notification. Starting with the model years in table 5 of subpart §60.4214, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60 Subpart IIII §60.4214(c)]
- IC2-24. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the

backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60 Subpart III §60.4214(c)]

***The following conditions apply to all units:***

- IC2-25. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]
- IC2-26. The permittee shall not allow SO<sub>2</sub> emissions from liquid fuel-burning equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

**Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary) – Diesel Fuel No. 2***

- IC2-27. A model number or other acceptable form of permanent (non-removable) identification shall be on each engine. [OAC 252:100-8-6(a)(1)]
- IC2-28. Permittee shall keep records of hours of operation for each unit, specifying emergency, maintenance, or non-emergency usage. [OAC 252:100-8-6]
- IC2-29. Compliance with the sulfur emission standards shall be fulfilled by using low sulfur diesel oil (0.05 weight percent or less). [OAC 252:100-8-6(a)(1)(C)]
- IC2-30. The permittee shall keep records of operation as listed below. These records shall be retained on-site for a period of at least five years and shall be made available to regulatory personnel upon request. [40 CFR 63 Subpart ZZZZ, OAC 252:100-8-6]
- a. Dates, hours, and purpose of operation of the unit (maintenance, testing, or emergency).
  - b. Fuel records to verify compliance.
  - c. Corrective action records for PM filter, if so equipped.
  - d. Manufacturer's engine certification verification, if applicable.
  - e. Documentation of the engine manufacturer's written operating instructions and procedures.

<b>IC3, IntComb-3, Compression Ignition Internal Combustion Engines &gt; 500-bhp, Non-Emergency Units</b>
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The permittee is authorized to add or replace non-emergency generators rated  $\geq$  500-hp subject to the applicable specific conditions for IC-3, per facility-wide specific condition #3.

- IC3-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

- IC3-2. This EUG is the total of all diesel-fueled, internal combustion engines > 500-hp installed and operated seasonally in referenced locations. The number, make, model, and serial number of covered engines may be changed without prior notification. No individual engine under this EUG will have a ton per year limit. All engines collectively will have the aggregate limits for each EU shown in Table 1.  
[State enforceable; OAC 252:100-8-6(a)(1)]
- IC3-3. The permittee shall keep records of operation for units as listed below. These records shall be retained on-site for a period of at least five-years and shall be made available to regulatory personnel upon request.  
[OAC 252:100-8-6 (a)(3)(B)]
- a. Fuel usage per generator unit (monthly and calendar year totals).
  - b. Spreadsheet of emission calculations based on fuel usage and emission data to demonstrate compliance with the EUG emission limits.
  - c. Hours of operation for each generator unit measured by a non-resettable hour meter.
  - d. Vendor or manufacturer's emission data for each generator set.
  - e. O & M records to demonstrate good combustion practices are being used.
  - f. Records required by NSPS Subpart IIII and NESHAP Subpart ZZZZ.
- IC3-4. The permittee shall not allow particulate matter emissions to exceed the emission limits in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. Good combustion practices should assure compliance with this limit.  
[OAC 252:100-19]
- IC3-5. The permittee shall not allow SO<sub>2</sub> emissions from liquid fuel-burning equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. Use of fuel meeting Specific Condition 10 standards will assure compliance with this limit. [OAC 252:100-31-25]

#### **40 CFR 60 Subpart IIII**

Note: The temporary units on-site are exempted under the referenced definitions in §60.4219. These engines do not meet the definition of stationary internal combustion engines because they are non-road engines, therefore they are not subject to Subpart IIII.  
[40 CFR60 Subpart IIII §60.4219]

The following conditions apply if engines qualifying as stationary internal combustion engines are installed at the facility:

- IC3-6. The permittee shall ensure that pre-2007 model year engines manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005, comply with the emission standards in Table 1 of Subpart IIII. [40 CFR 60 Subpart IIII, §60.4204(a)]
- IC3-7. Engines with 2007 model year and later must comply with the emission standards for new CI engines in §60.4201 for the model year 2007 and later stationary CI ICE, as

- applicable. [40 CFR 60 Subpart IIII, §60.4204(b)]
- IC3-8. Affected sources under Subpart IIII shall operate and maintain stationary compression ignition internal combustion engine (CI ICE) that achieve the emission standards in §60.4204 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60 Subpart IIII, §60.4206]
- IC3-9. The permittee shall use only diesel fuel meeting the requirements specified in §60.4207. [40 CFR 60 Subpart IIII, §60.4207]
- IC3-10. Engines installed shall comply with the dates specified for applicable model year engines in §60.4208. [40 CFR 60 Subpart IIII, §60.4208]
- IC3-11. If the permittee installs an engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the operator when the high backpressure limit of the engine is approached. [40 CFR 60 Subpart IIII, §60.4209(b)]
- IC3-12. If engines are installed which are subject to Subpart IIII emission standards, the permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator and approved by the manufacturer. [40 CFR 60 Subpart IIII, §60.4211(a)]
- IC3-13. Engines subject to §60.4211 shall demonstrate compliance according to one of the methods listed therein. [40 CFR 60 Subpart IIII, §60.4211(b)]
- IC3-14. If performance testing is required, then the permittee shall follow the methods and other procedures listed in §60.4212. [40 CFR 60 Subpart IIII, §60.4211(b)(5)]
- IC3-15. If an affected unit is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the operator that the high backpressure limit of the engine is approached. [40 CFR 60 Subpart IIII, §60.4214]
- IC3-16. The permittee shall submit an initial notification for non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified. Required notification details are in subparagraphs of this section. [40 CFR 60.4214(a)]

**40 CFR 63 Subpart ZZZZ**

*Under Subpart ZZZZ, units which commenced construction on or after December 19, 2002, are defined as new sources. Tinker AFB does not own or operate any permanently installed non-emergency RICE that would be subject to this rule. The facility operates only emergency units*

(generators and fire pump engines rated at  $\geq 500$ -bhp) which have their respective requirements listed under EUG IC2.

Note: Temporary units leased for the summer are exempted under the referenced definitions in §63.6585. Because these engines meet the definition of non-road engines, they are not subject to Subpart ZZZZ. [40 CFR63 Subpart ZZZZ §63.6585(a)]

The following conditions apply if engines that do not qualify as non-road engines are installed at the facility:

- IC3-17. New stationary RICE must comply with applicable emission limitations and operating limitations upon start-up. [40 CFR 63 Subpart ZZZZ, §63.6595(a) (3)]
- IC3-18. CI stationary RICE shall comply with the emission limitations in Table 2a and the operating limitations in Table 2b. [40 CFR 63 Subpart ZZZZ, §63.6600(b)]
- IC3-19. During periods of startup emissions limitations for CI stationary RICE in Table 2a are:
- a. Reduce CO emissions by 70 percent or more; OR
  - b. Limit concentration of formaldehyde in the exhaust to 580 parts per billion by volume dry or less at 15 percent O<sub>2</sub>. [40 CFR 63 Subpart ZZZZ, Table 2a]
- IC3-20. The permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63 Subpart ZZZZ, Table 2a]
- IC3-21. If the permittee elects to comply with the emission limitations for CO or formaldehyde using an oxidation catalyst to reduce CO emissions or limit the concentration of formaldehyde in the RICE exhaust, the permittee shall:
- a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and
  - b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350°F. [40 CFR 63 Subpart ZZZZ, Table 2b(1)]
- IC3-22. If the permittee elects to comply with the emission limitations for CO or formaldehyde using an oxidation catalyst to reduce CO emissions or limit the concentration of formaldehyde in the RICE exhaust, the permittee shall comply with any operating limitations approved by the Administrator. [40 CFR 63 Subpart ZZZZ, Table 2b(2)]

- IC3-23. This general requirement for compliance with this subpart requires that the permittee be in compliance with emission limitations and operating limitations at all times.  
[40 CFR 63 Subpart ZZZZ, §63.6605(a)]
- IC3-24. The permittee must operate and maintain any affected source, including air pollution control and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.  
[40 CFR 63 Subpart ZZZZ, §63.6605(b)]
- IC3-25. The permittee shall conduct an initial performance test or any other applicable initial compliance demonstration in Table 4 within 180 days of the compliance date in §63.6595 and according to the provisions of §63.7(a)(2).  
[40 CFR 63 Subpart ZZZZ, §63.6610(a)]
- IC3-26. The permittee is not required to conduct an initial performance test on an engine for which a performance test was previously conducted and meets all of the requirements of §63.6610(d).  
[40 CFR 63 Subpart ZZZZ, §63.6610(d)]
- IC3-27. The permittee shall conduct subsequent performance tests as specified in Table 3, if applicable.  
[40 CFR 63 Subpart ZZZZ, §63.6615]
- IC3-28. The permittee shall comply with subsequent performance tests and other procedural requirements listed in this section.  
[40 CFR 63 Subpart ZZZZ, §63.6620]
- IC3-29. If the permittee elects to install a continuous emission monitoring system or a continuous parameter monitoring system as specified in Table 5, the permittee shall comply with applicable monitoring, installation, operation, and maintenance requirements listed in this section.  
[40 CFR 63 Subpart ZZZZ, §63.6625]
- IC3-30. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 2a and 2c to this subpart.  
[40 CFR 63 Subpart ZZZZ, §63.6625(h)]
- IC3-31. The permittee shall demonstrate initial compliance with each applicable emission and operating limitation that applies according to Table 5.  
[40 CFR 63 Subpart ZZZZ, §63.6630(a)]
- IC3-32. During the initial performance test, the permittee shall establish each operating limitation in Table 2b that applies.  
[40 CFR 63 Subpart ZZZZ, §63.6630(b)]
- IC3-33. The permittee shall submit notification of compliance status containing the results of the initial compliance demonstration according to the requirements in §63.6645.  
[40 CFR 63 Subpart ZZZZ, §63.6630(c)]

- IC3-34. The permittee shall monitor and collect data to demonstrate continuous compliance with emission and operating limitations as listed in this section.  
[40 CFR 63, Subpart ZZZZ §63.6635]
- IC3-35. The permittee shall demonstrate continuous compliance with each emission and operating limitation in Tables 2a and 2b that apply according to methods specified in Table 6.  
[40 CFR 63 Subpart ZZZZ, §63.6640(a)]
- IC3-36. The permittee shall report each instance that the engine did not meet an emission or operating limitation in Tables 2a, 2b, and 8. Note that for new, reconstructed, or rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup are not violations.  
[40 CFR 63 Subpart ZZZZ, §63.6640(b), (d), and (e)]
- IC3-37. The permittee shall comply with notification requirements listed in §63.6645 to include but are not limited to applicable notifications required under Subpart A per Table 8, initial notification of start-up within 120 days, performance testing notifications, initial compliance demonstrations and Notification of Compliance Status.  
[40 CFR 63 Subpart ZZZZ, §63.6645]
- IC3-38. The permittee shall submit reports as listed and required in §63.6650 which include but are not limited to applicable reports listed in Table 7, compliance reports, deviation reports, and include information in Title V semi-annual monitoring/compliance reports.  
[40 CFR 63 Subpart ZZZZ, §63.6650]
- IC3-39. The permittee shall maintain records as listed in §63.6655 to verify compliance with applicable emission and operating limitations, copies of all notifications, records of each continuous emission monitoring system or continuous parameter monitoring system, and applicable records in Table 6. [40 CFR 63 Subpart ZZZZ, §63.6655]
- IC3-40. The permittee shall have a start-up, shutdown, and malfunction plan if an engine is equipped with a continuous monitoring system.  
[40 CFR 63 Subpart ZZZZ, §63.6665 and §63.6(e)(3)]

<b>ND1, NCDepnt-1, Non-chemical Depainting</b>
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**Specific Conditions*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- ND1-1. The permittee shall operate and maintain the unit according to manufacturer's specifications. During periods of malfunction, substitute materials may be used provided that they minimize organic HAP emissions and are not used for more than 15 days annually.  
[40 CFR 63, Subpart GG, 63.746(b)(2)]
- ND1-2. The permittee shall operate the units in accordance with start-up, shutdown, and malfunction plans.  
[40 CFR 63, Subpart GG, 63.743(b)]



- ND1-3. This EUG includes all non-chemical depainting cleaning operations at the facility. As such, non-chemical depainting operations may be added, removed, and relocated at this facility under advance approval, provided that any such change meets the facility-wide specific conditions in Section A of this permit.  
[40 CFR 63, Subpart GG, 63.741(c)]

**Compliance Monitoring, Reporting and Recordkeeping**  
***Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- ND1-4. The permittee shall fulfill notification requirements in §63.9(a)-(e) and (h)-(j) as applicable, and §63.10(a), (b), (d) and (f), recordkeeping and reporting requirements. All recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A.  
[40 CFR 63, Subpart GG, 63.753(a)(1)]
- ND1-5. The permittee shall submit semiannual reports identifying any new non-chemical depainting techniques used since the last report.  
[40 CFR 63, Subpart GG, 63.753(d)(1)(v)]
- ND1-6. The permittee shall submit semiannual reports including the required information on the malfunction of non-chemical depainting methods as well as notification of instances when filters/water wash systems were operating outside of specifications.  
[40 CFR 63, Subpart GG, 63.753(d)(1)(vi)]
- ND1-7. The permittee shall submit semiannual reports of all periods when a depainting operation was not immediately shut down when the pressure drop was outside the specified limits.  
[40 CFR 63, Subpart GG, 63.753(d)(1)(vii)]

**Specific Conditions**  
***Scenario 2 (Advance approval)***

- ND1-8. The permittee is required to provide initial notification to DEQ for a newly constructed or reconstructed paint booth (or booth/hangar) that is a major source.  
[40 CFR 63, Subpart A, 5(b)]

<b>SC1, SrfCoat-1, Aerospace Surface Coating, With Dry Filters</b>
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**Specific Conditions**  
***Scenario 1 (Primary) – Aerospace Coating Operations***

- SC1-1. This operating scenario may be implemented by the facility without the need for a permit revision or notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating.  
[OAC 252:100-8]
- SC1-2. Transfer of primers and topcoats shall be conducted in accordance with good

housekeeping measures, so as to minimize spills.

[40 CFR 63, Subpart GG, 63.745(b)]

- SC1-3. Only primers and topcoats meeting the following organic HAP and VOC content limits as applied, may be used: [40 CFR 63, Subpart GG, 63.745(c)]

<i>Category</i>	<i>Organic HAP Content</i>	<i>VOC Content</i>
Primer	≤ 2.9 lbs/gal (less water)	≤ 2.9 lbs/gal (less water)
Topcoat	≤ 3.5 lbs/gal (less water)	≤ 3.5 lbs/gal (less water)

- SC1-4. Primers and topcoats shall be applied using an application method or combination of methods as specified in 40 CFR 63.745(f)(1) or (2), including but not limited to brush coating and HVLP spraying, except for exempt situations as listed in 40 CFR 63.745(f)(3). Spray guns shall be operated in accordance with the facility's and/or manufacturers' specifications. [40 CFR 63, Subpart GG, 63.745(f)]

- SC1-5. Coating operations shall be performed in a booth equipped with the following, in accordance with applicable standards: [40 CFR 63, Subpart GG, 63.745(g)]

- a. Air flow directed downward onto or across the part being coated and exhausted through one or more outlets, and
- b. Appropriate (2- or 3-stage) dry filter controls, based on date of installation. The filter system must be maintained in good working order and equipped with a continuously monitored differential pressure gauge. If the pressure drop is outside the specified limits, the coating operation shall be shut down immediately.

NOTE: Listed in 40 CFR 63.745(g)(4) are coating activities exempt from these control requirements, including but not limited to painting activities in an area where it is not technically feasible to paint in a booth. Tinker AFB submitted a list of several SC1 and SC2 operations with a request to be officially exempted by EPA and EPA approved their exemption. DEQ has determined that spraying minor amounts of primer in SC1 and SC2 emission units is therefore permissible.

- SC1-6. The permittee shall conduct the handling and transfer of HAP containing waste in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.748]

- SC1-7. The permittee shall use coatings that contain VOCs equal to or below the listed limits. [OAC 252:100-39-47]

- SC1-8. This EUG includes all surface coating operations at the facility. As such, surface coating operations may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Aerospace Coating Operations***

- SC1-9. The permittee shall record the pressure drop across the dry particulate filter system at the start of each shift during which coating operations occur. These records shall be retained for at least 5 years from the date of recording.  
[40 CFR 63, Subpart GG, 63.752]
- SC1-10. The permittee shall submit semiannual reports that identify any instance when a primer or topcoat, as applied, exceeds the applicable organic HAP or VOC content limit specified in § 63.745(c). Permittee shall submit annual reports listing the number of times the pressure drop was outside specified limits.  
[40 CFR 63, Subpart GG, 63.753]
- SC1-11. The permittee shall use coatings that contain VOCs equal to or below the listed limits.  
[OAC 252:100-39-47]

**Specific Conditions*****Scenario 2 (Secondary) – Non-Aerospace Coating Operations***

- SC1-12. This operating scenario may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating.  
[OAC 252:100-8]
- SC1-13. The permittee shall use coatings that contain VOCs equal to or below the listed limits.  
[OAC 252:100-39-47]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 2 (Secondary) – Non-Aerospace Coating Operations***

- SC1-14. The permittee shall maintain material safety data sheets (or equivalent) documenting volatile organic content of coatings used.  
[OAC 252:100-39-47]

**Specific Conditions*****Scenario 3 (Alternate) - SrfCoat-2 or SrfCoat-3***

- SC1-15. These operating scenarios may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating.  
[OAC 252:100-8]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 3 (Alternate) - SrfCoat-2 or SrfCoat-3***

See applicable requirements under the applicable EUG (SrfCoat-2 or SrfCoat-3).

**SC2, SrfCoat-2, Aerospace Surface Coating, Brush or Spray Touch up****Specific Conditions*****Scenario 1 (Primary) – Aerospace Coating Operations***

SC2-1. Transfer of primers and topcoats shall be conducted in accordance with good housekeeping measures, so as to minimize spills. [40 CFR 63, Subpart GG, 63.745(b)]

SC2-2. Only primers and topcoats meeting the following organic HAP and VOC content limits as applied, shall be used: [40 CFR 63, Subpart GG, 63.745(c)]

<b>Category</b>	<b>Organic HAP Content</b>	<b>VOC Content</b>
Primer	≤ 2.9 lbs/gal (less water)	≤ 2.9 lbs/gal (less water)
Topcoat	≤ 3.5 lbs/gal (less water)	≤ 3.5 lbs/gal (less water)

SC2-3. The permittee is authorized to conduct coating activities exempted from control requirements in 40 CFR 63.745(g)(4). This includes painting activities in an area where it is not technically feasible to paint in a booth. [40 CFR 63, Subpart GG, 63.745(g)]

SC2-4. The permittee shall conduct the handling and transfer of HAP containing waste in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.748]

SC2-5. This EUG includes all surface coating operations at the facility. As such, surface coating operations may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

SC2-6. The permittee shall use coatings that contain VOCs equal to or below the listed limits. [OAC 252:100-39-47]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) – Aerospace Coating Operations***

SC2-7. The permittee shall maintain records of the name, VOC content as received and as applied of each primer and topcoat used; maintain records of the mass of organic HAP emitted, all background data and the volume used in each coating category per month for each uncontrolled primer used; and maintain these records for at least 5 years. [40 CFR 63, Subpart GG, 63.752]

SC2-8. The permittee shall submit semiannual reports that identify any instance when a primer or topcoat, as applied, exceeds the applicable organic HAP or VOC content limit specified in §63.745(c). The permittee shall submit annual reports listing the number of times the pressure drop was outside specified limits.

[40 CFR 63, Subpart GG, 63.753]

- SC2-9. The permittee shall maintain material safety data sheets (or equivalent) documenting volatile organic contents of coatings used. [OAC 252:100-39-47]

**Specific Conditions**

***Scenario 2 (Secondary) – Non-Aerospace Coating Operations***

- SC2-10. This operating scenario may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8]
- SC2-11. The permittee shall use coatings that contain VOCs equal to or below the listed limits. [OAC 252:100-39-47]

**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 2 (Secondary) – Non-Aerospace Coating Operations***

- SC2-12. The permittee shall maintain material safety data sheets (or equivalent) documenting organic contents of coatings used. [OAC 252:100-37 & 100-43]
- SC2-13. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

**Specific Conditions**

***Scenario 3 (Alternate) – SrfCoat-3***

- SC2-14. These operating scenarios may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8]

**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 3 (Alternate) – SrfCoat-3***

See applicable requirements under the EUG SrfCoat-3.

**Scenario 4 (Advance approval) - SrfCoat-2 or SrfCoat-3**

- SC2-15. DEQ has granted advance approval to the permittee to construct and operate any combination of EUs covered by EUGs SC-2, SC-3, and SC-4, as long as the PTE for the additional EUs does not exceed the PSD thresholds. [OAC 252:100-8]

**SC3, SrfCoat-3, Surface Coating, Aerospace Specialty Coatings****Specific Conditions*****Scenario 1 (Primary)***

- SC3-1. The permittee shall use specialty coatings that contain VOCs equal to or below the listed VOC limits as listed in Appendix N. These limits do not apply to coatings applied via aerosol. [OAC 252:100-39-47]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary)***

- SC3-2. The permittee shall maintain material safety data sheets (or equivalent) documenting volatile organic contents of coatings used. [OAC 252:100-43]
- SC3-3. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

**Scenario 2 (Advance approval) - SrfCoat-2 or SrfCoat-3**

- SC3-4. DEQ has granted advance approval to the permittee to construct and operate any combination of EUs covered by EUGs SC-2, SC-3, and SC-4 so long as the PTE for the additional EUs does not exceed the PSD thresholds. [OAC 252:100-8]

<b>SC4, SrfCoat-4, Non-aerospace Surface Coating</b>
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Note: When the EPA promulgates the DLSME NESHAP, many of the emissions unit sources assigned to this EUG will be subject to additional requirements and therefore be redesignated as emission units in SC5.

**Specific Conditions*****Scenario 1 (Primary)***

- SC4-1. The permittee shall use coatings that contain VOCs equal to or below the applicable limits in OAC 252:100-37-25. [OAC 252:100[37-25]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary)***

- SC4-2. The permittee shall maintain material safety data sheets (or equivalent) documenting organic contents of coatings used. [OAC 252:100-37 & 100-43]
- SC4-3. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

**SC5, SrfCoat-5, DLSME Surface Coating**

When the DLSME NESHAP is finalized, some of the paint booths in EUG SC-4 will become subject to the regulations and will be transferred to EUG SC5 upon being modified or within the compliance time period. These sources have been kept segregated during the transition period, with a draft list of applicable specific conditions, based on a preliminary draft DLSME NESHAP. After EPA publishes the final DLSME rule, any new coating operations with DLSME applicability will be subject to these requirements upon startup. Specific conditions in this EUG are based on the draft rule and may need to be modified, however any changes should be minor and not require undergoing public review again. After EPA promulgates the final rule, the specific conditions will be revised to reflect the changes, if any, in the regulatory requirements from those in the proposed rule.

**Specific Conditions*****Scenario 1 (Primary)***

- SC5-1. Limit uncontrolled organic HAP emissions to the atmosphere by using coatings that comply with the applicable HAP content limit specified in Table 1 of this subpart. No other coatings are subject to HAP content limits under this subpart. The HAP content limits in Table 1 do not apply to coatings in small containers and to expired coatings, as defined in §63.3689. [40 CFR 63, Subpart LLLL, 63.3700(b)(2)]
- SC5-2. If the permittee thins the coatings listed in Table 1 before applying them to a substrate, the permittee must use organic HAP-free thinners, or thin in accordance with the applicable standardization document, equipment publication or technical data for the coating being applied. [40 CFR 63, Subpart LLLL, 63.3700(b)(3)]
- SC5-3. For motor vehicle and mobile equipment refinishing operations, all painters and all shop personnel, including contract personnel, that spray apply refinish coatings must be certified as having completed training in the proper mixing, handling, and application of automotive refinish materials, and the proper setup and maintenance of spray equipment. The training program must include, at a minimum, the items listed in 63.3692(b)(1) through (3). [40 CFR 63, Subpart LLLL, 63.3703 and 63.3692(a)(1)][40 CFR 63, Subpart GG, 63.748]
- SC5-4. For motor vehicle and mobile equipment refinishing operations, all spray-applied coatings must be applied in a spray booth or preparation station that meets the requirements of paragraph (i) and either paragraph (ii) or (iii) below:
- All spray booths and preparation stations must be fitted with polyester fiber or fiberglass particle filters on the exhaust, or must be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray.
  - Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment must be fully enclosed with a full roof, and four complete walls or complete side curtains, and must be ventilated at negative pressure so

that air is drawn into any openings in the booth walls or preparation station curtains.

- c. Spray booths and preparation stations that are used to coat vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth.

[40 CFR 63, Subpart LLLL, 63.3703, 63.3692(a)(2), and 63.3692(b)]

- SC5-5. For motor vehicle and mobile equipment refinishing operations, all spray-applied coatings must be applied with a high-volume, low-pressure (HVLP) spray gun, electrostatic application, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve comparable transfer efficiency, and for which written approval has been obtained from the Administrator.

[40 CFR 63, Subpart LLLL, 63.3703 and 63.3692(a)(3)]

- SC5-6. All new and existing personnel at an affected motor vehicle and mobile equipment refinishing operation, including contract personnel, who spray apply surface coatings must be trained by the dates as specified below:

- a. For new sources, all personnel must be trained and certified no later than 60 days after hiring or no later than 60 days after the date the final rule was published in the Federal Register, whichever is later.
- b. For existing sources, all personnel must be trained and certified no later than 60 days after hiring or no later than 6 months after the date the final rule was published in the Federal Register, whichever is later.
- c. Training and certification will be valid for a period not to exceed 5 years after the date the training is completed, and all personnel must receive refresher training and be re-certified every 5 years.

[40 CFR 63, Subpart LLLL, 63.3703 and 63.3692(b)]

- SC5-7. General work practices must minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials subject to this subpart. At a minimum, the following practices must be implemented:

- a. All organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.
- b. Spills of organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.
- c. Organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
- d. Mixing vessels that contain organic HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
- e. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

[40 CFR 63, Subpart LLLL, 63.3701(a)]



**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary)***

- SC5-8. The permittee shall submit initial notifications of applicability and notification of compliance status as required under §63.3710.  
[40 CFR 63, Subpart LLLL, 63.3710(a), (b), and (c)]
- SC5-9. During each semiannual compliance period, the permittee shall maintain records: the name of each coating, thinner and/or additive; cleaning material used; HAP content for each coating used for which a limit is specified in Table 1 and their associated thinners.  
[40 CFR 63, Subpart LLLL, 63.3730(d)]
- SC5-10. The permittee must keep the records of certification that each painter has completed the training specified in §63.3692(b) with the date the initial training and the most recent refresher training was completed.  
[40 CFR 63, Subpart LLLL, 63.3703 and 63.3698(d)]

**Specific Conditions*****Scenario 2 (Secondary) Application methods other than spray application (brush, roller, etc)***

- SC5-11. Limit uncontrolled organic HAP emissions to the atmosphere by using coatings that comply with the applicable HAP content limit specified in Table 1 of this subpart. No other coatings are subject to HAP content limits under this subpart. The HAP content limits in Table 1 do not apply to coatings in small containers and to expired coatings, as defined in §63.3689.  
[40 CFR 63, Subpart LLLL, 63.3700(b)(2)]
- SC5-12. If the permittee thins the coatings listed in Table 1 before applying them to a substrate, the permittee must use organic HAP-free thinners, or thin in accordance with the applicable standardization document, equipment publication or technical data for the coating being applied.  
[40 CFR 63, Subpart LLLL, 63.3700(b)(3)]
- SC5-13. General work practices must minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials subject to this subpart. At a minimum, the following practices must be implemented:
- All organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers;
  - Spills of organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized;
  - Organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes;
  - Mixing vessels that contain organic HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the

- contents;
- e. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

[40 CFR 63, Subpart LLLL, 63.3701(a)]

**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 2 (Secondary)***

- SC5-14. The permittee shall submit initial notifications of applicability and notification of compliance status as required under §63.3710.

[40 CFR 63, Subpart LLLL, 63.3710(a), (b), and (c)]

- SC5-15. During each semiannual compliance period, Tinker AFB shall maintain records: the name of each coating, thinner and/or additive; cleaning material used; HAP content for each coating used for which a limit is specified in Table 1 and their associated thinners.

[40 CFR 63, Subpart LLLL, 63.3730(d)]

<b>SV1, Solvent-1, Cold Cleaning, Non-aerospace</b>
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**Specific Conditions**

***Scenario 1 (Primary)***

- SV1-1. The permittee shall equip the units with a cover/door, operable with one hand, internal or external drainage facilities, and a label summarizing operating practices shall be attached in a conspicuous position.

[OAC 252:100-39-42(a)(1)(A),(B),(C)]

**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary)***

- SV1-2. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants.

[OAC 252:100-5]

<b>SV2, Solvent-2, Solvent Usage, Spray Gun Pattern Testing</b>
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**Specific Conditions**

***Scenario 1 (Primary)***

- SV2-1. Exemption. Owners or operators of sources that emit less than 100 pounds of VOC per 24-hour day are exempt from the requirements of this section.

[OAC 252:100-37-25(c)]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary)***

- SV2-2. The permittee shall maintain monthly records of solvent usage. [OAC 252:100-43]
- SV2-3. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

**SV3, Solvent-3, Solvent Usage, Non-Aerospace Cleaning, DLSME**

When the DLSME NESHAP is finalized, the solvent used for substrate cleaning operations for non-aerospace vehicles and equipment will become subject to the regulation. Substrate cleaning means the use of liquid materials to remove contaminants and other materials, such as dirt, grease and oil from a substrate before or after application of a coating. Some of the existing sources will be redesignated as sources under this EUG. These EUs have been kept segregated during the transition period, with a draft list of applicable specific conditions, based on the preliminary draft DLSME NESHAP. In the interim after EPA publishes the final DLSME rule, any new cleaning with DLSME applicability will be subject to these requirements upon startup. Specific conditions in this EUG are based on the draft rule and may need to be modified, however any changes should be minor and not require public review again. After EPA promulgates the final rule, the specific conditions will be revised to reflect the changes, if any, in the regulatory requirements from those in the proposed rule.

**Specific Conditions*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- SV3-1. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]
- SV3-2. The permittee must use organic HAP-free cleaners for substrate cleaning prior to the application of all coatings, except sealants and adhesives, unless a standardization document, equipment publication or technical data for that process authorizes the use of an organic HAP-containing material. This emission limit does not apply to cleaning materials used to remove sealants and adhesives or to prepare the substrate for application of sealants and adhesives. [40 CFR 63, Subpart LLLL, 63.3700(b)(1)]
- SV3-3. The permittee shall comply with the general work practices in §63.3701(a). [40 CFR 63, Subpart LLLL, 63.3701]

**Compliance Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary) and Scenario 2 (Advance approval)***

- SV3-4. The permittee must minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials.

[40 CFR 63, Subpart LLLL, 63.3701(a)(1)]

- SV3-5. Spills of organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.

[40 CFR 63, Subpart LLLL, 63.3701(a)(2)]

- SV3-6. Organic HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.

[40 CFR 63, Subpart LLLL, 63.3701(a)(3)]

- SV3-7. Mixing vessels that contain organic HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.

[40 CFR 63, Subpart LLLL, 63.3701(a)(4)]

- SV3-8. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

[40 CFR 63, Subpart LLLL, 63.3701(a)(5)]

<b>TK1, Tank-1, Tanks Subject to Subpart Kb, MOGAS</b>
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**Specific Conditions**

***Scenario 1 (Primary)***

- TK1-1. The permittee shall equip the tank(s) with an internal floating roof.

[40 CFR 60, Subpart Kb, 112b(a)(1)]

- TK1-2. The permittee shall equip the tank(s) with an internal floating roof and a permanent submerged fill pipe.

[OAC 252:100-37-15]

**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary)***

- TK1-3. The permittee shall perform a visual inspection of the internal floating roof every 12 months and repairs shall be made prior to filling the tank. The permittee shall perform a visual inspection of the internal floating roof, slotted membranes, gaskets, and sleeve seals each time tank is emptied and degassed, or at least once every 10 years.

[40 CFR 60, Subpart Kb, 60.113b(a)]

- TK1-4. The permittee shall notify the ODEQ in writing at least 30 days prior to the filling or refilling of each storage vessel for which an internal floating roof inspection is required, to afford the ODEQ the opportunity to have an observer present. If the inspection is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the ODEQ at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone, immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is

received by the ODEQ at least 7 days prior to the refilling.

[40 CFR 60, Subpart Kb, 60.113b(a)(5)]

- TK1-5. The permittee shall maintain records of the volatile organic liquid (VOL) stored, period of storage and maximum true vapor pressure for 5 years per Title V requirements and keep records of the tank dimensions and capacity for the life of the tank.

[40 CFR 60, Subpart Kb, 60.116b(a),(b),(c)]

- TK1-6. The permittee shall maintain records of tank design parameters, floating roof inspections, and true vapor pressure of the VOL stored. [OAC 252:100-39-41]

- TK1-7. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

<b>TK2, Tank-2, Tanks Subject only to Oklahoma Air Pollution Control Rules</b>
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**Specific Conditions**

***Scenario 1 (Primary)***

- TK2-1. The permittee shall equip these tanks with a permanent submerged fill pipe or a vapor-recovery system as required in 252:100-37(a)(2). [OAC 252:100-37]

**Compliance Monitoring, Reporting and Recordkeeping**

***Scenario 1 (Primary)***

- TK2-2. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

<b>VD1, VaporDeg-1, Vapor Degreasers, Conventional</b>
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**Specific Conditions**

***Scenario 1 (Primary)***

- VD1-1. The permittee shall equip the degreaser with an idling and downtime mode cover, that completely covers the cleaning machine openings when in place and is free of cracks, holes or defects. [40 CFR 63, Subpart T, 63.463(a)(1)(i)]

- VD1-2. The permittee shall ensure that the: [40 CFR 63, Subpart T, 63.463(a)(2)-(7)]

- a. Degreaser shall have a freeboard ratio of 0.75 or greater;
- b. Degreaser shall be equipped with an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts to the removal of parts;
- c. Degreaser shall be equipped with a device that shuts off the sump heat if the sump liquid level drops to the sump heater coils;

- d. Degreaser shall be equipped with a vapor level control device;
- e. Degreaser shall be equipped with a primary condenser; and
- f. Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of paragraph (e)(2)(vii) of 40 CFR 63.463.

VD1-3. The permittee shall not allow the idling emission to exceed 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of solvent/air interface area.  
[40 CFR 63, Subpart T, 63.463(b)(2)(ii)]

VD1-4. The permittee shall ensure that: [40 CFR 63, Subpart T, 63.463(d)(1)-(12)]

- a. The degreaser cover is in place during the idling and downtime mode unless solvent is removed from the machine or monitoring is being conducted that requires the cover to be open;
- b. The parts basket shall occupy no more than 50% of the solvent/air interface area unless the parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less;
- c. Parts baskets or parts shall not be removed from the machine until dripping stops;
- d. During start-up, the primary condenser should be turned on before the sump heater;
- e. During shutdown, the sump heater should be turned off and the vapor layer allowed to collapse before the primary condenser is turned off;
- f. Solvent shall be transferred using threaded or leak-proof couplings, and the end of the pipe should be below the liquid solvent surface;
- g. Solvent cleaning machines shall be maintained and operated according to the manufacturers recommendation or equally effective procedures;
- h. Operators will complete and pass the applicable sections of the test of solvent cleaning operating procedures in Appendix A if requested during an inspection;
- i. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers, which may be equipped with a pressure relief device but will not allow liquid solvent to drain from the container; and
- j. Sponges, fabric, wood, and paper products shall not be cleaned.

VD1-5. The permittee shall ensure that: [40 CFR 63, Subpart T, 63.463(e)(2)(iv)]

- a. Idling mode cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place;
- b. The idling-mode cover is maintained free of cracks, holes, and other defects; and
- c. Monthly visual inspections as specified 40 CFR 63 Subpart T 63.466(b)(1) shall be used to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects.

- VD1-6. The permittee shall ensure that the unit has a cover or door that can easily be opened or closed without disturbing the vapor zone. Unit shall be equipped with safety switches for the condenser and spray pumps. [OAC 252:100-39-42(b)(1)(A),(B)]
- VD1-7. The permittee shall ensure that the unit be equipped with one or more of the following control devices/techniques: [OAC 252:100-39-42(b)(1)(C)]
- a. Freeboard ratio of not less than 0.75;
  - b. Refrigerated chiller;
  - c. Enclosed design;
  - d. Carbon adsorber.
- VD1-8. The permittee shall ensure that the unit be equipped with a permanent label summarizing the operating requirements in OAC 252:100-39-42(b)(1)(C). [OAC 252: 100-39-42(b)(2)]
- VD1-9. The permittee shall: [OAC 252: 100-39-42(b)(2)(A)]
- a. Keep cover closed at all times except when degreasing parts;
  - b. Rack parts to allow full drainage;
  - c. Move parts in and out at no more than 11 ft per minute;
  - d. Degrease in the vapor mode at least 30 seconds or until condensation ceases;
  - e. Tip out pools of VOC on parts before removal;
  - f. Allow parts to dry within the degreaser for at least 15 seconds or until visually dry;
  - g. Assure that VOC leaks are immediately repaired or the degreaser is shut down; and
  - h. Store VOC waste only in closed container.
- VD1-10. The permittee shall not: [OAC 252:100-39-42(b)(2)(B)]
- a. Degrease porous or absorbent materials such as cloth, leather, wood or rope;
  - b. Allow workloads to occupy more than half of the degreaser's open top area;
  - c. Spray above the vapor level;
  - d. Allow greater than 20% of VOC to evaporate when disposing of the waste or transferring it to another party;
  - e. Allow exhaust ventilation to exceed 65 cfm/ft<sup>2</sup> of degreaser open area;
  - f. Use ventilation fans near the opening; and
  - g. Allow water to be visually detectable in VOC exiting the water separator.

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary)***

- VD1-11. The permittee shall perform weekly monitoring using colorimetric tube to ensure that the concentration of organic solvent in the exhaust from this device does not exceed

100 parts per million of any halogenated HAP. If the halogenated HAP solvent concentration in the carbon adsorber exhaust exceeds 100 parts per million, corrective action will be taken so that the exhaust concentration of halogenated HAP solvent is brought below 100 parts per million. The permittee shall ensure that the carbon adsorber bed is not bypassed during desorption. The permittee shall ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level. [40 CFR 63, Subpart T, 63.463(e)(2)(vii)(A)-(C)]

- VD1-12. The permittee shall comply with the idling emission limit standard. The permittee shall conduct an initial performance test to determine compliance and conduct periodic monitoring (at least annually) to demonstrate ongoing compliance. The permittee shall operate the solvent cleaning machine within parameters identified in the initial performance test. [40 CFR 63, Subpart T, 63.463(f)(1)-(3)]
- VD1-13. The permittee shall document potential to emit from all solvent cleaning operations. [40 CFR 63, Subpart T, 63.465(e)]
- VD1-14. The permittee shall: [40 CFR 63, Subpart T, 63.466(c)]
- Perform measurement of hoist speed by measuring the time it takes the hoist to travel a measured distance;
  - Perform visual inspections on a monthly basis; and
  - If after a year of monitoring there are no exceedances, monitoring may be performed quarterly as long as there are no exceedances.
- VD1-15. The permittee shall maintain required records for the lifetime of the machine. The permittee shall maintain the owner's manuals or operating instructions, documentation on the date of installation, and records of the initial performance test demonstrating compliance with the idling emission limit and the monitored parameters during this test and records of the halogenated HAP content of the solvent. [40 CFR 63, Subpart T, 63.467(a)]
- VD1-16. The permittee shall maintain required records of monitoring and corrective actions in electronic or written form for a period of 5 years. The permittee shall also maintain records of annual solvent consumption for the machine for a period of 5 years. [40 CFR 63, Subpart T, 63.467(b)]
- VD1-17. The permittee shall submit initial statement of compliance to the administrator including the test report for the test of idling emissions, a list of the control equipment that will be used to achieve compliance, the parameters that will be monitored, their frequency and the values of these parameters for the first month after the compliance date. [40 CFR 63, Subpart T, 63.468(d)]
- VD1-18. The permittee shall submit an annual report (by February 1 each year) including a signed statement that all operators have been trained on the proper operation of the machine and their control devices and have passed a test as specified in



63.463(d)(10).

[40 CFR 63, Subpart T, 63.468(f)(1)]

- VD1-19. The permittee shall include in the annual report an estimate of solvent consumption for each solvent cleaning machine during the reporting period.

[40 CFR 63, Subpart T, 63.468(f)(2)]

- VD1-20. The permittee shall submit an exceedance report on a semiannual basis unless an exceedance occurs. Once an exceedance has occurred, a quarterly reporting format shall be followed until a request to reduce reporting frequency under paragraph (i) of 40 CFR 63.468 is approved.

[40 CFR 63, Subpart T, 63.468(h)-(i)]

<b>VD2, VaporDeg-2, Vapor Degreasers, Vacuum</b>
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Tinker AFB does not currently have any vacuum degreasers, however this EUG is retained in the event vacuum degreasers are installed in the future.

**Specific Conditions**

***Scenario 1 (Primary)***

- VD2-1. The permittee shall ensure that emissions from the device are equal to or less than the appropriate limits described in this regulation.

[40 CFR 63, Subpart T, 63.464(a)(2)]

- VD2-2. The permittee shall demonstrate compliance with the applicable 3-month rolling average monthly emission limit on a monthly basis in accordance with 63.465(b) and (c). The permittee shall report exceedances in accordance with 63.468(h) (see below).

[40 CFR 63, Subpart T, 63.464(b),(c)]

- VD2-3. The permittee shall ensure on the first operating day of every month that solvent is clean and return solvent to fill line.

[40 CFR 63, Subpart T, 63.465(b)]

- VD2-4. The permittee shall ensure that units are equipped with one or more of the following control devices/techniques.

[OAC 252:100-39-42(b)(1)(C)]

- a. Enclosed design.
- b. Carbon adsorber.
- c. A control system demonstrated to have a control efficiency equal to or greater than any systems listed above.

- VD2-5. The permittee shall ensure that units are equipped with a permanent label summarizing the operating requirements in OAC 252:100-39-42(b)(1)(C).

[OAC 252:100-39-42(b)(2)]

**Monitoring, Reporting and Recordkeeping*****Scenario 1 (Primary)***

- VD2-6. The permittee shall document potential to emit from all solvent cleaning operations.  
[40 CFR 63, Subpart T, 63.465(e)]
- VD2-7. The permittee shall maintain records of the method used to determine cleaning capacity. The permittee shall maintain records in written or electronic form for a period of 5 years.  
[40 CFR 63, Subpart T, 63.467(c),(d)]
- VD2-8. The permittee shall submit solvent emission reports to the Administrator every year for batch vapor or in-line solvent cleaning machines.  
[40 CFR 63, Subpart T, 63.468(g)]
- VD2-9. The permittee shall submit exceedance reports on a semiannual basis unless an exceedance occurs. Once an exceedance has occurred, a quarterly reporting format shall be followed until a request to reduce reporting frequency under paragraph (i) of 40 CFR 63.468 is approved.  
[40 CFR 63, Subpart T, 63.468(h)-(i)]
- VD2-10. The permittee shall measure and record the concentration of halogenated HAP solvent in the exhaust of the carbon adsorber weekly with a colorimetric detector tube, while the solvent cleaning machine is in the working mode and is venting to the carbon adsorber.  
[40 CFR 63, Subpart T, 63.466(e)(1)]

APPENDIX A						
SIGNIFICANT COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
EUG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFECTIVE DATE
ExtComb-1	0081	BOILER #1, NATURAL GAS/ #2 FUEL OIL, 85.3 MMBtu/hr	2212	NORTH CENTRAL BOILER PLANT	72 ABW/CEC	1982
ExtComb-1	0082	BOILER #2, NATURAL GAS/ #2 FUEL OIL, 85.3 MMBtu/hr	2212	NORTH CENTRAL BOILER PLANT	72 ABW/CEC	1982
ExtComb-1	0083	BOILER #3, NATURAL GAS/ #2 FUEL OIL, 83.9 MMBtu/hr	2212	NORTH CENTRAL BOILER PLANT	72 ABW/CEC	1986
ExtComb-2	0061	BOILER #1, NATURAL GAS/ #2 FUEL OIL, 121 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	1985
ExtComb-2	0062	BOILER #2, NATURAL GAS/ #2 FUEL OIL, 121 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	1985
ExtComb-4	0051	BOILER, NATURAL GAS/ #2 FUEL OIL, 20 MMBtu/hr IDLE	821	NAVY, EAST SIDE OF PLANT	72 ABW/CEC	1990
ExtComb-4	0052	BOILER, NATURAL GAS/ #2 FUEL OIL, 20 MMBtu/hr IDLE	821	NAVY	72 ABW/CEC	1990
ExtComb-4	0065	BOILER #5, NATURAL GAS/ #2 FUEL OIL, 75 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	MAY 02
ExtComb-5	0053	BOILER, NATURAL GAS/ #2 FUEL OIL, 5.6 MMBtu/hr	821	NAVY	72 ABW/CEC	1990
ExtComb-5	0054	BOILER, NATURAL GAS/ #2 FUEL OIL, 5.6 MMBtu/hr	821	NAVY	72 ABW/CEC	1990
ExtComb-6	0041	BOILER, NATURAL GAS, 8.92 MMBtu/hr	964	Boiler Plant	72 ABW/CEC	1986
ExtComb-6	0042	BOILER, NATURAL GAS, 9.68 MMBtu/hr	964	Boiler Plant	72 ABW/CEC	2000
ExtComb-6	0100	FURNACE # 1, PROCESS AIR HEATER, 14 MMBtu/hr	200	SE SIDE	76 MSG/MXCVA	~ 1988
ExtComb-6	0101	FURNACE # 2, PROCESS AIR HEATER, 14 MMBtu/hr	200	SE SIDE	76 MSG/MXCVA	~ 1988
ExtComb-7	0063	BOILER #3, NATURAL GAS/ #2 FUEL OIL, 121 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	NOV 07
ExtComb-8	0015	BOILER, NATURAL GAS/ #2 FUEL OIL, 14.3 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	2005
ExtComb-8	0016	BOILER, NATURAL GAS/ #2 FUEL OIL, 14.3 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	2005
ExtComb-9	0011	BOILER, NATURAL GAS/	208	BOILER PLANT	72 ABW/CEC	1942

APPENDIX A						
SIGNIFICANT COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
		#2 FUEL OIL, 116 MMBtu/hr				
ExtComb-9	0012	BOILER, NATURAL GAS/ #2 FUEL OIL, 116 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	1942
ExtComb-9	0013	BOILER, NATURAL GAS/ #2 FUEL OIL, 116 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	1942
ExtComb-9	0014	BOILER, NATURAL GAS/ #2 FUEL OIL, 116 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	1942
ExtComb-9	0031	BOILER, NATURAL GAS/ #2 FUEL OIL, 29 MMBtu/hr	5802	NORTH SIDE, WEST	72 ABW/CEC	1958
ExtComb-9	0032	BOILER, NATURAL GAS/ #2 FUEL OIL, 29 MMBtu/hr	5802	NORTH SIDE, EAST	72 ABW/CEC	1958
ExtComb-10	0091	BOILER #1, NATURAL GAS, 187.5 MMBtu/hr	9301	Tinker Aerospace Complex Boiler Plant	72 ABW/CEC	
ExtComb-10	0092	BOILER #1, NATURAL GAS, 187.5 MMBtu/hr	9301	Tinker Aerospace Complex Boiler Plant	72 ABW/CEC	
ExtComb-10	0093	BOILER #3, NATURAL GAS/ LANDFILL GAS, 191 MMBtu/hr	9301	Tinker Aerospace Complex Boiler Plant	72 ABW/CEC	
IntComb-1	5289	DIESEL GENERATORS (<500 BHP), TEMPORARY	2101	various	MXCYBA/B/C	SEASONAL
IntComb-2	7210	FIRE PUMP ENGINE: DIESEL	7017	west of building	72 ABW/CEC	2009
IntComb-2	7221	EMERGENCY GENERATOR, 2000 kW: DIESEL	1083	SOUTH EAST CORNER	72 ABW/CEC	SEP 2004
IntComb-2	7222	EMERGENCY GENERATOR, 2000 kW: DIESEL	1083	SOUTH EAST CORNER	72 ABW/CEC	SEP 2004
IntComb-2	7223	EMERGENCY GENERATOR, 2000 kW: DIESEL	1083	SOUTH EAST CORNER	72 ABW/CEC	SEP 2004
IntComb-2	7226	EMERGENCY GENERATOR, 670 kW: DIESEL	3001	3001-G	72 ABW/CEC	26 JUL 2006
IntComb-2	7227	EMERGENCY GENERATOR, 350 kW: DIESEL	996	SOUTH FUEL YARD NEAR BLDG 996	72 ABW/CE	est MAR 07
IntComb-2	7229	EMERGENCY GENERATOR, 100 kW: GENERAC DIESEL	5811	TELEPHONE SWITCH	72 ABW/CE	FEB 07
IntComb-2	7230	EMERGENCY GENERATOR, 30 kW: DIESEL	42	NAVAID	72 ABW/CE	JAN 07
IntComb-3	5642	DIESEL GENERATORS, LARGE (> 500 BHP), TEMPORARY	2102,2211,3705,3703	various	76 MXSS/MXDEA	SEASONAL

APPENDIX B						
SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
EUG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFECTIVE DATE
CalTest-1	5015	FUEL COMPONENT TESTING OPERATIONS	3108	NORTH END OF BLDG	MXCCCB	1943
CalTest-1	5415	FUEL COMPONENT TESTING OPERATIONS	3902	throughout building	552 CMMXS/MXDPAB	1995
CalTest-1	5417	FUEL COMPONENT TESTING OPERATIONS	3907	MULTIPLE VENTS WITHIN BUILDING	MXCCCB	Est Jan 2011
ChemDpnt-1	2031	DEPAINTING OPERATIONS, E-3 AIRCRAFT, NON-HAP	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	JUL 1997
ChemDpnt-1	2154	DEPAINTING OPERATIONS, AIRCRAFT, NON-HAP	3228	ONE DOCK	MXACCB	JUN 00
ChemDpnt-1	2405	AIRCRAFT DEPAINTING, NON-HAP STRIPPING	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1994
ChemDpnt-1	2412	AIRCRAFT DEPAINTING, ZERO-HAP STRIPPER	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	JUL 1997
ChemDpnt-1	2435	AIRCRAFT DEPAINTING, NON-HAP STRIPPING	3228	DOCK,ASF	MBCCA	JUN 02
ChemDpnt-1	2540	DEPAINTING OUTJOBS, NON-HAP	BASEWIDE		MAB	
ChemDpnt-2	2032	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MBCCB	PRE 1994
ChemDpnt-2	2052	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1994
ChemDpnt-2	2053	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	PRE 1994
ChemDpnt-2	2437	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	3228	DOCK,ASF	MBCCA	JUN 02
ChemDpnt-2	2541	DEPAINTING OUTJOBS, HAP-CONTAINING STRIPPER	BASEWIDE		MAB	
ChemDpnt-2	3062	DEPAINTING OUTJOBS, HAP-CONTAINING STRIPPER	230	ALL DOCKS	EMS/MXMFS	
ChemDpnt-2	3317	AIRCRAFT DEPAINTING	820	HANGAR	CSCW-1 NAVY	AUG 08
ChemDpnt-2	3846	AIRCRAFT PARTS DEPAINTING	1030	HANGAR	507 MOF/MXOOL	AUG 08
ChemDpnt-3	2051	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	PRE 1994
ChemDpnt-3	2153	DEPAINTING OPERATIONS, PARTS	3228	ONE DOCK	MXACCB	JUN 00
ChemDpnt-3	2406	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1994
ChemDpnt-3	2413	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	PRE 1994
ChemDpnt-3	2436	PARTS DEPAINTING WITH HAP-CONTAINING STRIPPER	3228	DOCK,ASF	MBCCA	JUN 02
ChemDpnt-3	2542	DEPAINTING OUTJOBS, PARTS	BASEWIDE		MAB	

APPENDIX B						
SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
ChemDpnt-3	2621		2122	Center dock, post A40	76 AMXG	14 May 08
ChemDpnt-3	3036	PARTS DEPAINTING (HAP) - IDLE	289	PAINT BOOTH AND HANGAR	EMS/MXMFS	PRIOR TO 1998
ChemDpnt-3	3053	SPOT DEPAINTING, AGE AND AIRCRAFT PARTS ONLY	289	PAINT BOOTH/ HANGAR	EMS/MXMFS	~1979
ChemDpnt-3	3316	PARTS DEPAINTING WITH HAP-CONTAINING STRIPPER	820	HANGARS VQ-3, VQ-4	CSCW1N415	PRIOR TO 1998
ChemDpnt-3	3407	PARTS DEPAINTING WITH HAP-CONTAINING STRIPPER	1068	ROOM 122, PAINT BOOTH	507 MXS/LGMFC	PRIOR TO 1998
ChemDpnt-3	4446	CHEMICAL PAINT REMOVAL TANK	3221		547 PMXS/MXDRBH	2009
ChemDpnt-3	4690	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
ChemDpnt-3	4691	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
ChemDpnt-3	4692	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
ChemDpnt-3	4693	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
ChemDpnt-3	5017	STRIPPING BOOTH, RADOMES	2211	E-7	MXCYDC	1969
ChemDpnt-3	5052	STRIPPING BOOTH, AIRCRAFT PARTS	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ChemDpnt-3	5053	STRIPPING BOOTH, AIRCRAFT PARTS	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ChemDpnt-3	5560	HEATED PARTS DEPAINTING TANK	3001	Ha-50	552 CMMXS/MXDRAD	~1993
ChemDpnt-3	5600	HEATED PARTS DEPAINTING TANK	3705	G-32 (Bay E)	551 CMMXS/MXDPAE	FEB 2007
Chromium-1	4416	CHROMIUM ELECTROPLATING OPERATIONS	3001	M-61, AREA 2	MXPCCA	OCT 1990
ClnFlush-1	2004	COLD CLEANING TANK	2121	SOUTH DOCK, POST A10 SOUTH WALL	MXABF	PRE 1994
ClnFlush-1	2116	FLUSH CLEANING	2122	B-1 PDM Dock	MXABB	2009
ClnFlush-1	2500	COLD CLEANING TANK, 15 GAL, B-1 LANDING GEAR	2122	F-40 NORTH DOCK	MXABB	Prior to 1998
ClnFlush-1	2501	COLD CLEANING TANK, FLUSH CLEANING	3001	X-53	564 AMXS/MXDPAE	Prior to 1998
ClnFlush-1	2504	CLEANING TANK, FLUSH CLEANING	3001	Y-6	564 AMXS/MXDPAE	2009
ClnFlush-1	2552	COLD CLEANING UNIT	3705	A-30 SW CORNER	76AMXG\MXAATB	MAY 2005
ClnFlush-1	2555	COLD CLEANING PARTS WASHER	3001	X-49	MABATA	16 SEP 05
ClnFlush-1	2600	PARTS WASHING TANK, AIRCRAFT PARTS	3001	Y-21	564 AMXS/MXDPAE	NOV 06
ClnFlush-1	2601	PARTS WASHING TANK, AIRCRAFT PARTS	3001	Y-38	564 AMXS/MXDPAE	NOV 06
ClnFlush-1	2602	FLUSH CLEANING OF AIRCRAFT PARTS	2136	B-15	566 AMXS/MXDPAE	MAR 08
ClnFlush-1	3049	AQUEOUS PARTS WASHER	230	HYDRAULIC SHOP, ROOM SE-145	552 CMS/MXMCP	~1979
ClnFlush-1	3304	COLD CLEANING TANKS, TWO	825	NAVY/BOEING	CSCW1/N415	1993
ClnFlush-1	3400	COLD CLEANING TANK, 165 GAL	1041	WEST WALL	507 MS/LGMAP	1995
ClnFlush-1	3405	COLD CLEANING TANK, 50 GAL, GSE FILTERS	1070	ROOM 106	507 MXS/LGMG	Prior to 1990

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
ClnFlush-1	3451	COLD CLEANING TANK, 25 GAL	1041	ROOM 6 BEARING ROOM	507 MS/LGMSA	Prior ro 1994
ClnFlush-1	3452	COLD CLEANING TANK, 10 GAL	1041	ROOM 6 BEARING ROOM	507 MS/LGMSA	1995
ClnFlush-1	3734	COLD CLEANING TANK , 15 GAL	260	C-6 (east end of bldg)	OLTK/L30	1996
ClnFlush-1	3841	PARTS WASHING TANK, AIRCRAFT PARTS	1041	NE CORNER	507MXS/HYDR	OCT 06
ClnFlush-1	4046	COLD CLEANING TANK, AGITATED	3221	M-14	547 PMXS/MXDRAA	1989
ClnFlush-1	4055	COLD CLEANING TANK	3001	C-84 (inside Seal Room)	548 PMXS/MXDRCDB	JAN 1986
ClnFlush-1	4155	COLD CLEANING TANK	3001	W-83 (inside Lapping Room)	544 PMXS/MXDPABB	JAN 1986
ClnFlush-1	4188	PRESSURE SPRAY WASHER	3001	L-105	548 PMXS/MXDVAAA	DEC 1993
ClnFlush-1	4190	PRESSURE SPRAY WASHER	3001	C-101	548 PMXS/MXDVAAA	DEC 1993
ClnFlush-1	4191	PRESSURE SPRAY WASHER	3001	C-101	548 PMXS/MXDVAAA	Prior to 1998
ClnFlush-1	4207	PRESSURE SPRAY WASHER	3221	M-13	547 PMXS/MXDRAA	Prior to 1998
ClnFlush-1	4226	PRESSURE SPRAY WASHER	3001	E-91	548 PMXS/MXDRACC	Prior to 1998
ClnFlush-1	4428	CLEANING TANK	3001	B-103	548 PMXS/MXDVA	DEC 1981
ClnFlush-1	4447	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3221		547 PMXS/MXDRBH	2009
ClnFlush-1	4448	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3221		547 PMXS/MXDRBH	2009
ClnFlush-1	4449	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3221		547 PMXS/MXDRBH	2009
ClnFlush-1	4468	ULTRASONIC CLEANING TANK	3001	W-83 (inside Lapping Room)	544 PMXS/MXDPABB	Prior to 1998
ClnFlush-1	4470	GAS PATH AND EXTERIOR JET ENGINE CLEANING	3703	SOUTH WEST SIDE OF BUILDING	MXPATAA	Prior to 1998
ClnFlush-1	4471	GAS PATH AND EXTERIOR JET ENGINE CLEANING	3234		MAE-MXPAT	Prior to 1998
ClnFlush-1	4578	FLUSH CLEANING BOOTH	3001	X-53	545 PMXS/MXDPAB	AUG 2004
ClnFlush-1	4582	SPRAY BOOTH, STEAM CLEANING AND HAND WIPE	3001	X-53	545 PMXS/MXDPAB	JAN 2005
ClnFlush-1	4598	COLD CLEANING PARTS WASHER	3001	Y-77	544 PMXS/MXDPAA	AUG 06
ClnFlush-1	4608	PARTS WASHER, FLUSH CLEANING	3001	X-83	544 PMXS/MXDPAA	OCT 06
ClnFlush-1	4613	PARTS WASHER, FLUSH CLEANING	3001	X-77	544 PMXS/MXDPAA	2006
ClnFlush-1	4614	PARTS WASHER, FLUSH CLEANING	3705	STOCK ROOM C, E-18	545 PMXS/MXPDAB	MAR 07
ClnFlush-1	4615	PARTS WASHER	3001	X-85	544 PMXS/MXDPAA	MAR 07
ClnFlush-1	4618	POWER WASHER	3001	X-91	544 PMXS/MXDPAC	AUG 07
ClnFlush-1	4639	FLUSH CLEANING BOOTH	3705	E-18	545 PMXS/MXDPAB	OCT 2007
ClnFlush-1	4663	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	W-100	544 PMXS/MXDPAA	JAN 08
ClnFlush-1	4664	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	U-83	544 PMXS/MXDPABB	JAN 08
ClnFlush-1	4665	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	V-109	544 PMXS/MXDPAB	JAN 08
ClnFlush-1	4666	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	V-107	544 PMXS/MXDPAB	JAN 08

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
ClnFlush-1	4667	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	P-80	544 PMXS/MXDPAB	JAN 08
ClnFlush-1	4674	PARTS WASHER, AEROSPACE FLUSH CLEANING	3001	Y-94	544 PMXS/MXDPA	JUL 08
ClnFlush-1	4676	COLD CLEANING TANK	3001	W83 (inside Lapping Room)	544 PMXS/MXDPA	2008
ClnFlush-1	4677	Power Washer (Flush Cleaning)	3001	J-85	548 PMXS/MXDRCAC	2008
ClnFlush-1	4678	Power Washer (Flush Cleaning)	3001	Q-97	544 PMXS/MXDPA	2008
ClnFlush-1	4679	Power Washer (Flush Cleaning)	3001	W-87	544 PMXS/MXDPA	2008
ClnFlush-1	4680	Power Washer (Flush Cleaning)	3001	Q-86	544 PMXS/MXDPA	2008
ClnFlush-1	4684	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
ClnFlush-1	4685	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
ClnFlush-1	4686	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
ClnFlush-1	4687	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
ClnFlush-1	4688	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
ClnFlush-1	4689	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
ClnFlush-1	5011	THREE-SINK AIRCRAFT PARTS CLEANING UNIT	200	NORTH SECTION, CLEAN ROOM	550 CMXS/MXDPA	1983
ClnFlush-1	5032	COLD CLEANING TANK	2210	LC#3, Post B-3	552 CMMXS/MXDPA	2009
ClnFlush-1	5033	COLD CLEANING TANK	2210	LEAN CELL #3	MNMCC	Prior to 1998
ClnFlush-1	5035	PRESSURE SPRAY WASHER	2210	Lean Cell #1	552 CMMXS/MXDPA	2009
ClnFlush-1	5036	PRESSURE SPRAY WASHER	2210	Lean Cell #3	552 CMMXS/MXDPA	2009
ClnFlush-1	5043	COLD CLEANING TANK, IDLE	3001	N-56	MXCCCA	Prior to 1995
ClnFlush-1	5046	FLUSH BOOTHS, THREE	3001	Ha-51, FLUSH ROOM (PBA ROOM, TF33 ROOM)	552 CMMXS/MXDRA	Prior to 1998
ClnFlush-1	5064	COLD CLEANING TANK	3001	U-39	MXCCFB	Prior to 1998
ClnFlush-1	5069	COLD CLEANING TANKS, TWO	3001	V-45	MXCCF	Prior to 1998
ClnFlush-1	5074	COLD CLEANING TANK	3001	Q-49	552 CMMXS/MXDPA	Prior to 1998
ClnFlush-1	5078	COLD CLEANING SOLVENT SPRAY BOOTH	3001	R-49	552 CMMXS/MXDPA	Prior to 1998
ClnFlush-1	5082	CLEANING PROCESS TANK	214		MXCVAFH	2009
ClnFlush-1	5157	COLD CLEANING TANK	230	Z-10	MXCCME	Prior to 1998
ClnFlush-1	5187	COLD CLEANING SOAK TANK AND CLEANING CABINET	3001	S-39	552 CMMXG/MXDPA	1994
ClnFlush-1	5189	COLD CLEANING SOAK TANK AND CLEANING CABINET	3001	T-43	MXCCFB	Prior to 1998
ClnFlush-1	5235	PRESSURE SPRAY WASHER	2210	WEST OF D-2	MNMCC	Prior to 1998



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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
ClnFlush-1	5243	PRESSURE SPRAY WASHER	2210	E-12	MNMCC	Prior to 1998
ClnFlush-1	5258	COLD CLEANING LINE	3001	BEARING SHOP	MXCCCA	Prior to 1998
ClnFlush-1	5261	PROCESS TANK, CLEAN ROOM TANK 11	3001	N-53	MXCCCA	1988
ClnFlush-1	5291	CLEAN FLUSH OPERATIONS	2101	INSIDE SANDING WASH BOOTH	MXCYBA/B/C	MAY 2003
ClnFlush-1	5321	INSULATION REMOVAL, FLUSH CLEANING	3001	T-43	MXCCFB	
ClnFlush-1	5341	COLD CLEANING OPERATIONS	3001	BEARING SHOP	MXCCCA	
ClnFlush-1	5503	COLD CLEANING PROCESS TANK	214		MXCVAFH	Prior to 1998
ClnFlush-1	5504	COLD CLEANING TANK	200	NORTH SECTION OF BLDG: CLEANING	550 CMXS/MXDPAA	Prior to 1998
ClnFlush-1	5507	PRESSURE SPRAY WASHER GLOVE BOX	200		550 CMXS/MXDPAA	Prior to 1998
ClnFlush-1	5508	PROCESS TANK, FLUSH CLEANING	200		550 CMXS/MXDPAA	Prior to 1998
ClnFlush-1	5520	CLEANING TANK, ULTRASONIC: DETERGENT	3001	U-37	552 CMMXS/MXDPBB	Prior to 1998
ClnFlush-1	5563	COLD CLEANING TANK	200	NORTH SECTION OF BLDG: CLEANING	550 CMMXS/MXDPAA	MAY 2003
ClnFlush-1	5573	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
ClnFlush-1	5574	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
ClnFlush-1	5575	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
ClnFlush-1	5576	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
ClnFlush-1	5577	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	
ClnFlush-1	5578	ULTRASONIC CLEANER	200	North Section, Clean Room	550 CMMXS/MXDPAA	
ClnFlush-1	5581	COLD CLEANING TANK	214	CLEAN ROOM	76 CMXG/MXCVAFH	
ClnFlush-1	5584	FLUSH CLEANING UNIT	214	CLEAN ROOM	76 CMXG/MXCVAFH	
ClnFlush-1	5585	STEAM CLEANER, HURRISAFE	3705	G-33 (Bay E)	551 CMMXS/MXDPAAC	
ClnFlush-1	5603	AIRCRAFT PARTS FLUSH CLEANING	200	NORTH SECTION, CLEAN ROOM	550 CMMXS/MXDPAA	FEB 07
ClnFlush-1	5604	AIRCRAFT PARTS FLUSH CLEANING	200	NORTH SECTION, CLEAN ROOM	550 CMMXS/MXDPAA	FEB 07
ClnFlush-1	5609	GLOVE BOX CLEAN FLUSH UNIT	200	NORTH CLEANING ROOM	550 CMXS/MXDPAA	MAR 07
ClnFlush-1	5610	GLOVE BOX CLEAN FLUSH UNIT	200	NORTH CLEANING ROOM	550 CMXS/MXDPAA	MAR 07
ClnFlush-1	5615	SOLVENT TANK	2210	D-7	MNMCC	Prior to 1998
ClnFlush-1	5616	SOLVENT TANK	2210	D-7	MNMCC	2001
ClnFlush-1	5617	COLD CLEANING TANK	2210	D,E-7	MNMCC	Prior to 1998
ClnFlush-1	5618	PARTS WASHER	2210	LANDING GEAR/TIRE SHOP	MNMCC	Prior to 1998

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
ClnFlush-1	5619	SOLVENT TANK	2210	LEAN CELL #3	MNMCC	2000
ClnFlush-1	5620	SOLVENT TANK	2210	LEAN CELL #3	MNMCC	2000
ClnFlush-1	5621	HYDRAULIC FLUSH STAND	2210	LEAN CELL #3	MNMCC	Prior to 1998
ClnFlush-1	5622	GLOVE BOX FLUSH CLEANING UNIT	2210	LEAN CELL #3	MNMCC	Prior to 1998
ClnFlush-1	5623	COLD CLEANING TANK	2210	LEAN CELL #3, B-5	MNMCC	Prior to 1998
ClnFlush-1	5624	COLD CLEANING TANK	2210	LEAN CELL #2	MNMCC	Prior to 1998
ClnFlush-1	5625	PARTS WASHER	2210	LEAN CELL #2	MNMCC	2000
ClnFlush-1	5626	SOLVENT TANK	2210	LEAN CELL #2	MNMCC	2000
ClnFlush-1	5627	COLD CLEANING TANK	2210	LEAN CELL #2	MNMCC	Prior to 1998
ClnFlush-1	5628	SOLVENT TANK	2210	LEAN CELL #2	MNMCC	2000
ClnFlush-1	5629	GLOVE BOX FLUSH CLEANING UNIT	2210	LEAN CELL #1	MNMCC	Prior to 1998
ClnFlush-1	5630	SOLVENT TANK	2210	LEAN CELL #1	MNMCC	2000
ClnFlush-1	5631	PARTS WASHER	2210	LEAN CELL #1	MNMCC	2000
ClnFlush-1	5632	COLD CLEANING TANK	2210	LEAN CELL #1	MNMCC	Prior to 1998
ClnFlush-1	5633	HYDRAULIC FLUSH STAND	2210	LEAN CELL #1	MNMCC	Prior to 1998
ClnFlush-1	5634	COLD CLEANING TANK	2210	LEAN CELL #1	MNMCC	Prior to 1998
ClnFlush-1	5635	COLD CLEANING TANK	2210	TEST CELL AREA	MNMCC	Prior to 1998
ClnFlush-1	5637	COLD CLEANING TANK	3001	N-55 RM 111	MXDPAA	PRIOR TO 1998
ClnFlush-1	5639	COLD CLEANING GLOVE BOX	3001	N-55 RM 111	MXDPAA	PRIOR TO 1998
ClnFlush-1	5641	COLD CLEANING TANK	3001	N-55 RM 111	MXDPAA	PRIOR TO 1998
ClnFlush-1	5670	OPEN BOOTH FOR CLEANING BOOM PARTS	3705	G-31 (Bay E)	551 CMMXS/MXDPAAC	OCT 2007
ClnFlush-1	5675	COLD CLEANING TANK	3001	Q-49	552 CMMXS/MXDRAD	Dec 2008
ClnHWipe-1	2001	HAND WIPE CLEANING OPERATIONS	2121	EAST SIDE OF BLDG, CENTER	MXABF	PRE 1994
ClnHWipe-1	2033	HAND WIPE CLEANING OPERATIONS	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	PRE 1994
ClnHWipe-1	2100	HAND WIPE CLEANING OPERATIONS	2121	NORTH AND SOUTH DOCKS	MXABF	PRE 1994
ClnHWipe-1	2112	HAND WIPE CLEANING OPERATIONS	2122	B-1 MAINTENANCE/EGRESS	MXABB	PRE 1994
ClnHWipe-1	2123	HAND WIPE CLEANING OPERATIONS	2136	E-3 MAINTENANCE HANGAR AREA AND BACK SHOP	MXACE	PRE 1994
ClnHWipe-1	2127	HAND WIPE CLEANING OPERATIONS	240	BOTH DOCKS	MABATB	PRE 1994
ClnHWipe-1	2140	HAND WIPE CLEANING OPERATIONS	3102	KC-135 POST DOCK, NORTH	MABAT	PRE 1994
ClnHWipe-1	2150	HAND WIPE CLEANING OPERATIONS	3225	NEW PAINT FACILITY	MXACCB	PRE 1994

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ClnHWipe-1	2231	HAND WIPE CLEANING OPERATIONS, IDLE	3105	ONE DOCK	MABAT	PRE 1994
ClnHWipe-1	2238	HAND WIPE CLEANING OPERATIONS	230	TEXAS TOWER DOCK	MABCCA	PRE 1994
ClnHWipe-1	2402	HAND WIPE CLEANING OPERATIONS	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1994
ClnHWipe-1	2415	HAND WIPE CLEANING OPERATIONS	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	PRE 1994
ClnHWipe-1	2421	HAND WIPE CLEANING OPERATIONS	3001	Y-16, SOUTH MOVING LINE	72AMXG	PRE 1994
ClnHWipe-1	2430	HAND WIPE CLEANING OPERATIONS	2121	NE PART OF BLDG	MXACCB	Prior to 1998
ClnHWipe-1	2432	HAND WIPE CLEANING OPERATIONS	289	HANGAR	EMS/MXMFS	MAY 00
ClnHWipe-1	2439	HAND WIPE CLEANING OPERATIONS	3228	DOCK,ASF	MBCCA	JUN 02
ClnHWipe-1	2533	HAND WIPE CLEANING OPERATIONS	FLIGHTLINE		MAB	
ClnHWipe-1	2544	HAND WIPE CLEANING OPERATIONS	2122	SOUTH BAY, EAST DOCK	MXACCA	OCT 2003
ClnHWipe-1	2551	HAND WIPE CLEANING OPERATIONS	3705	SW CORNER	76AMXG/MXAATB	MAY 2005
ClnHWipe-1	3000	HAND WIPE CLEANING OPERATIONS, PHASE INSPECTION	230	INSPECTION OF E3-A, DOCK 244	CMS/MXMTC	~1979
ClnHWipe-1	3003	HAND WIPE CLEANING OPERATIONS	976	INSIDE BOOTH	EMS/MXMFS	1996
ClnHWipe-1	3016	HAND WIPE CLEANING OPERATIONS	260	NE AREA OF BLDG	OLTK/L30 [ACC CONTRACT]	Prior to 1998
ClnHWipe-1	3037	HAND WIPE CLEANING OPERATIONS	289	PAINT BOOTH	EMS/MXMFS	Prior to 1998
ClnHWipe-1	3038	HAND WIPE CLEANING OPERATIONS	289	HANGAR	EMS/MXMFS	Prior to 1998
ClnHWipe-1	3039	HAND WIPE CLEANING OPERATIONS	976	AWACS ALERT BOOTH AND HANGAR	CMS/MXMCF	Prior to 1998
ClnHWipe-1	3043	HAND WIPE CLEANING OPERATIONS	230	SURVEILLANCE RADAR FLIGHT, ROOM SE-160	CMS/MXMJE	~1979
ClnHWipe-1	3044	HAND WIPE CLEANING OPERATIONS	230	COMM/NAV, ROOM SE-124	MOS/MXCOV	~1979
ClnHWipe-1	3045	HAND WIPE CLEANING OPERATIONS	230	HANGAR/RAMP, ROOM SW-168	AMXS/MXAX	~1979
ClnHWipe-1	3048	HAND WIPE CLEANING OPERATIONS	230	GUIDANCE AND CONTROL, ROOM SE-124	CMS/MXMVA	~1979
ClnHWipe-1	3058	HAND WIPE CLEANING OPERATIONS	267	AAR CONTRACT OPERATIONS	AAR CONTRACT OPERATIONS	
ClnHWipe-1	3060	HAND WIPE CLEANING OPERATIONS	230	ALL DOCKS	EMS/MXMFS	
ClnHWipe-1	3063	HAND WIPE CLEANING OPERATIONS	255		552 96X AACS/DORL	Prior to 1998
ClnHWipe-1	3302	HAND WIPE CLEANING OPERATIONS	820	HANGARS VQ-3, VQ-4	CSCW1/N451	1993
ClnHWipe-1	3410	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	1068	ROOM 122, PAINT BOOTH	507 MXS/LGMFC	~1975
ClnHWipe-1	3821	HAND WIPE CLEANING OPERATIONS	1067	AIRCRAFT MAINTENANCE, INSIDE BLDG AND RAMP	507 AMXS	Prior to 1998
ClnHWipe-1	3839	HAND WIPE CLEANING OPERATIONS	1030	HANGAR	507 MXS/LGMG	Prior to 1990
ClnHWipe-1	4005	HAND WIPE CLEANING OPERATIONS	260		545 PMXS/MXDPA	2009
ClnHWipe-1	4130	HAND WIPE CLEANING OPERATIONS	3001	E-L -- 106-111	546 PMXS/MXDPA	Prior to 1998

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
ClnHWipe-1	4132	HAND WIPE CLEANING OPERATIONS	3001	F-79	MXPCCB	Prior to 1998
ClnHWipe-1	4145	HAND WIPE CLEANING OPERATIONS	3221	H-15	548 PMXS/MXDRAA	Prior to 1998
ClnHWipe-1	4149	HAND WIPE CLEANING OPERATIONS	3001	K-84	548 PMXS/MXDRCAC	Prior to 1998
ClnHWipe-1	4152	HAND WIPE CLEANING OPERATIONS	3001	L-93	548 PMXS/MXDRABB	Prior to 1998
ClnHWipe-1	4159	HAND WIPE CLEANING OPERATIONS	3705	SOUTH EAST CORNER	76 AMXG	Prior to 1998
ClnHWipe-1	4233	HAND WIPE CLEANING OPERATIONS	9001	Y39 - DD44 approximate	545 PMXS/MXDPAB	Prior to 1998
ClnHWipe-1	4237	HAND WIPE CLEANING OPERATIONS	3221	J-15	547 PMXS/MXDRBB	Prior to 1998
ClnHWipe-1	4239	HAND WIPE CLEANING OPERATIONS	3221	mezannine	547 PMXS/MXDRBD	June 2009
ClnHWipe-1	4240	HAND WIPE CLEANING OPERATIONS	3221	A-9	547 PMXS/MXDRBBE	Prior to 1998
ClnHWipe-1	4243	HAND WIPE CLEANING OPERATIONS	3221	G-17	547 PMXS/MXDRBD	Prior to 1998
ClnHWipe-1	4245	HAND WIPE CLEANING OPERATIONS	3001	I-91	548 PMXS/MXDVA A	Prior to 1998
ClnHWipe-1	4246	HAND WIPE CLEANING OPERATIONS	3001	M-61	MXPCCAH	Prior to 1998
ClnHWipe-1	4247	HAND WIPE CLEANING OPERATIONS	3001	F-79	MXPCCB	Prior to 1998
ClnHWipe-1	4248	HAND WIPE CLEANING OPERATIONS	3001	I-77	MXPCCB	Prior to 1998
ClnHWipe-1	4249	HAND WIPE CLEANING OPERATIONS	3001	U-65	548 PMXS/MXDRAD	Prior to 1998
ClnHWipe-1	4251	HAND WIPE CLEANING OPERATIONS	3001	P-99	MXPCIBNA	Prior to 1998
ClnHWipe-1	4252	HAND WIPE CLEANING OPERATIONS	3001	S-95	MXPCIBNB	Prior to 1998
ClnHWipe-1	4256	HAND WIPE CLEANING OPERATIONS	3001	K-97	MXPAAT/V	Prior to 1998
ClnHWipe-1	4257	HAND WIPE CLEANING OPERATIONS	3001	X-55	546 PMXS/MXDPAC	Prior to 1998
ClnHWipe-1	4258	HAND WIPE CLEANING OPERATIONS	3001	X-87	546 PMXS/MXDPAA	Prior to 1998
ClnHWipe-1	4259	HAND WIPE CLEANING OPERATIONS	3001	T-107	544 PMXS/MXDPAB	Prior to 1998
ClnHWipe-1	4260	HAND WIPE CLEANING OPERATIONS	3705		545 PMXS/MXDPAB	Prior to 1998
ClnHWipe-1	4261	HAND WIPE CLEANING OPERATIONS	3001	O-106	546 PMXS/MXDPAD	Prior to 1998
ClnHWipe-1	4268	HAND WIPE CLEANING OPERATIONS	3001	I-84 to M-86, second (mezzanine) level	548 PMXS/MXDRCA	Prior to 1998
ClnHWipe-1	4269	HAND WIPE CLEANING OPERATIONS	3001	D-95	MXPCIBNC	Prior to 1998
ClnHWipe-1	4271	HAND WIPE CLEANING OPERATIONS	3001	B-91	548 PMXS/MXDRACB & MXDRACC	Prior to 1998
ClnHWipe-1	4272	HAND WIPE CLEANING OPERATIONS	3001	B-88	MXPBMCD	Prior to 1998
ClnHWipe-1	4273	HAND WIPE CLEANING OPERATIONS	3703		MXPATBA/B	Prior to 1998
ClnHWipe-1	4274	HAND WIPE CLEANING OPERATIONS	3234		MAE-MXPAT	Prior to 1998
ClnHWipe-1	4275	HAND WIPE CLEANING OPERATIONS	3703	NORTH END	MXPATBA/B	Prior to 1998
ClnHWipe-1	4276	HAND WIPE CLEANING OPERATIONS	3001	K-88 to O-90 (approximately)	548 PMXS/MXDRABC	Prior to 1998
ClnHWipe-1	4277	HAND WIPE CLEANING OPERATIONS	3001	~F89 - H91	548 PMXS/MXDRACA	Prior to 1998
ClnHWipe-1	4280	HAND WIPE CLEANING OPERATIONS	3001	B-83	548 PMXS/MXDRCDB	Prior to 1998
ClnHWipe-1	4282	HAND WIPE CLEANING OPERATIONS	3001	M-84	548 PMXS/MXDRCA	Prior to 1998
ClnHWipe-1	4283	HAND WIPE CLEANING OPERATIONS	3001	H-101	548 PMXS/MXDVA	Prior to 1998
ClnHWipe-1	4284	HAND WIPE CLEANING OPERATIONS	3001	W103	544 PMXS/MXDPAA	Prior to 1998
ClnHWipe-1	4563	HAND WIPE CLEANING OPERATIONS	9001	Y-39 - DD-44 approximate	545 PMXS/MXDPAA	~ 1998
ClnHWipe-1	4566	HAND WIPE CLEANING OPERATIONS	3001	XY 70-75	76 PMXG/544 PMXS/MDPA	MAY 1999
ClnHWipe-1	4567	HAND WIPE CLEANING OPERATIONS	3001	X-89	544 PMXS/MXDPAA	Prior to 1998

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ClnHWipe-1	4575	HAND WIPE CLEANING OPERATIONS	3001	NW ANNEX, DOOR - 6E	PRATT & WHITNEY	AUG 02
ClnHWipe-1	4586	HAND WIPE CLEANING OPERATIONS	3001	X97-X101	MAEAN	JAN 2005
ClnHWipe-1	4599	HAND WIPE CLEANING OPERATIONS	3001	X-Y 77-86	544 PMXS/MXDPAA	JUL 06
ClnHWipe-1	5007	HAND WIPE CLEANING OPERATIONS	3108		552 CMMXS/MXDPAB	2009
ClnHWipe-1	5010	HAND WIPE CLEANING OPERATIONS	2101		MXCYBA/B/C	Prior to 1998
ClnHWipe-1	5019	HAND WIPE CLEANING OPERATIONS	2211		MXCYDC	1977
ClnHWipe-1	5109	HAND WIPE CLEANING OPERATIONS	200	BUILDING-WIDE	550 CMXS/MXDPAA	1975
ClnHWipe-1	5135	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	2211	BUILDING-WIDE USE	MXCYDC	Prior to 1998
ClnHWipe-1	5155	HAND WIPE CLEANING OPERATIONS	230	THROUGHOUT THE SHOP	MXCCME	Prior to 1998
ClnHWipe-1	5165	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	3707	ELECTRONIC REPAIR, RM 158	MXCVF	Prior to 1998
ClnHWipe-1	5218	HAND WIPE CLEANING OPERATIONS	3001	KC-51.1	552 CMMXS/MXDRAD	Prior to 1998
ClnHWipe-1	5220	SOLVENT USE, MACHINING OPERATIONS	3001	M-65	MXCCM	Prior to 1998
ClnHWipe-1	5255	HAND WIPE CLEANING OPERATIONS	3708		MXCVF	Prior to 1998
ClnHWipe-1	5280	SOLVENT USE, MACHINING OPERATIONS	3001	K-73	MXCCMW	Prior to 1998
ClnHWipe-1	5281	HAND WIPE CLEANING OPERATIONS	3001	N-47	552 CMMXS/MXDPAA	Prior to 1998
ClnHWipe-1	5282	HAND WIPE CLEANING OPERATIONS	3705	B-16/20	552 CMXS/MXDRAD	Prior to 1998
ClnHWipe-1	5283	HAND WIPE CLEANING OPERATIONS	3705	BAY E, CENTER AND EAST SIDE	551 CMMXS/MXDPBB	Prior to 1998
ClnHWipe-1	5284	HAND WIPE CLEANING OPERATIONS	3001	P-45	MXCCFA	Prior to 1998
ClnHWipe-1	5285	HAND WIPE CLEANING OPERATIONS	3001	U-39	MXCCFB	Prior to 1998
ClnHWipe-1	5287	HAND WIPE CLEANING OPERATIONS	3001	N-57	MXCCCA	Prior to 1998
ClnHWipe-1	5288	HAND WIPE CLEANING OPERATIONS	3001G	R-43	550 CMXS/MXDPBB	16 MAY 00
ClnHWipe-1	5310	HAND WIPE CLEANING OPERATIONS	2121	FIRST AND SECOND FLOORS	MXCYD/A	Prior to 1998
ClnHWipe-1	5322	SOLVENT USE, MACHINING OPERATIONS	2210	ASSEMBLY ROOM	MNMCC	Prior to 1998
ClnHWipe-1	5323	HAND WIPE CLEANING OPERATIONS	3001	R-53	552CMXS/MXDRAD	Prior to 1998
ClnHWipe-1	5326	HAND WIPE CLEANING OPERATIONS	214	F107 ASSEMBLY AREA, TEST CELLS	MXCVAFH	Prior to 1998
ClnHWipe-1	5571	SOLVENT USE, MACHINING OPERATIONS	3001	X103	MANMMM	JUL 2005
ClnHWipe-1	5651	HAND WIPE CLEANING OPERATIONS	3705	E-18	551 CMXS/MXDPAB	OCT 2007
ClnHWipe-1	5654	HAND WIPE CLEANING OPERATIONS	3705	THROUGHOUT SHOP	551 CMXS/MXDPBA	OCT 2007
ClnHWipe-1	5656	HAND WIPE CLEANING OPERATIONS	3705	THROUGHOUT SHOP	551 CMXS/MXDPBB	OCT 2007
ClnHWipe-2	3009	HAND WIPE CLEANING OPERATIONS, FUEL CELLS	976	AWACS ALERT, FUEL CELL	CMS/MXMCF	1990
ClnHWipe-2	3018	HAND WIPE CLEANING OPERATIONS, ADHESIVE BONDING	260	NE AREA OF BLDG	OLTK/L30 [ACC CONTRACT]	Prior to 1998
ClnHWipe-2	3055	HAND WIPE CLEANING OPERATIONS	230	ELECTRO- ENVIRONMENTAL, ROOM	MOS/MXMCE	Prior to 1998

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				SE-137		
ClnHWipe-2	3315	HAND WIPE CLEANING OPERATIONS, FUEL CELLS	820	HANGARS VQ-3, VQ-4	CSCW1/N415	Prior to 1998
ClnHWipe-2	3474	HAND WIPE CLEANING OPERATIONS	1082	BLADDER ROOM, RM 108	507 MXS/LGMAF	Prior to 1998
ClnHWipe-2	3817	HAND WIPE CLEANING OPERATIONS, LAB INSTRUMENTS	1030	507TH	507 MS/LG	Prior to 1998
ClnHWipe-2	5020	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	1055	OXYGEN SHOP	MXCVAD	Prior to 1998
ClnHWipe-2	5024	HAND WIPE CLEANING OPERATIONS, ELECTRONICS	230	USED THROUGHOUT THE SHOP	MXCCME	Prior to 1998
ClnHWipe-2	5083	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	214	112 ELECTRONIC FUEL CONTROL UNIT	MXCVAFH	1988
ClnHWipe-2	5174	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	3761	B-1 RADAR	MXCVF	Prior to 1998
ClnHWipe-2	5194	HAND WIPE CLEANING OPERATIONS	3001	P/W 39-41	552 CMXG/MXDPBB	Prior to 1998
ClnHWipe-2	5252	HAND WIPE CLEANING OPERATIONS, FUEL CELLS	229	FUEL CELL REPAIR	MXCCMG	Prior to 1998
ClnHWipe-2	5324	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	3708		MXCVF	Prior to 1998
ClnHWipe-2	5325	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	3707	ELECTRONIC REPAIR	MXCVF	1997
ClnHWipe-2	5327	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	200		550 CMXS/MXDPA	Prior to 1998
ClnSpray-1	2041	PAINT GUN CLEANING	2280	SOUTH DOCK	MXACCB	PRE 1994
ClnSpray-1	2236	PAINT GUN AND EQUIP NON-ATOMIZED CLEANING	3225	ONE DOCK	MXACCB	MAR 99
ClnSpray-1	2610	ENCLOSED PAINT GUN CLEANER	2122		566 AMXS/MXDVAB	JUL 07
ClnSpray-1	2611	ENCLOSED PAINT GUN CLEANER	2280	EAST WALL	566 AMXS/MXDVAB	JUL 07
ClnSpray-1	2612	ENCLOSED PAINT GUN CLEANER	3225	SOUTH WALL DOCK	566 AMXS/MXDVAB	JUL 07
ClnSpray-1	2613	ENCLOSED PAINT GUN CLEANER	2121	EAST SIDE OF BLDG, CENTER (PAINT BOOTH)	566 AMXS/MXDVAB	JUL 07
ClnSpray-1	3050	DISASSEMBLED AND ENCLOSED PAINT GUN CLEANING	289	PAINT BOOTH AND HANGAR, RM 1	EMS/MXMFS	~1979
ClnSpray-1	3051	DISASSEMBLED PAINT GUN CLEANING	976	AWACS ALERT PAINT BOOTH	EMS/MXMFS	~1979
ClnSpray-1	3052	DISASSEMBLED PAINT GUN CLEANING	976	AWACS ALERT HANGAR	CMS/MXMCF	~1979
ClnSpray-1	3311	DISASSEMBLED PAINT GUN CLEANING	820	HANGAR	CSCW1/N415	~1988
ClnSpray-1	3844	ENCLOSED PAINT GUN CLEANER	1130		72 ABW/LGTV	Prior to 1998
ClnSpray-1	3850	SPRAY GUN CLEANING, DISASSEMBLED, NON-ATOMIZED	2101		76 AMXG/QPQ	SEP 08
ClnSpray-1	4559	ENCLOSED SPRAY GUN CLEANER	3001	X-55	545 PMXS/MXDPA	~1993
ClnSpray-1	4560	ENCLOSED SPRAY GUN CLEANING	3221		547 PMXS/MXDRBBE	Before 1990
ClnSpray-1	4588	ENCLOSED PAINT GUN CLEANER	3001	X-80	544 PMXS/MXDPA	JAN 2007

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
ClnSpray-1	4602	ENCLOSED PAINT GUN CLEANER - FUTURE	3705	BAY A	PMXG	FUTURE
ClnSpray-1	4604	PAINT GUN CLEANER	3001	X-88	544 PMXS/MXDPAA	OCT 06
ClnSpray-1	4612	ENCLOSED PAINT GUN CLEANER	3221	D-2	547 PMXS/MXDRBBE	APR 06
ClnSpray-1	4625	PAINT GUN CLEANING CABINET	3001	X-55	545 PMXS/MXDPAB	PRIOR TO 2007
ClnSpray-1	4658	ENCLOSED PAINT GUN CLEANER	3001	S-85	544PMXS/MXDPAB	JAN 08
ClnSpray-1	4660	ENCLOSED PAINT GUN CLEANER	3001	U-84	544 PMXS/MXDPAB	JAN 08
ClnSpray-1	4662	ENCLOSED PAINT GUN CLEANER	3001	U-106	544 PMXS/MXDPAB	JAN 08
ClnSpray-1	4696	PAINT GUN WASHER	3001	K-77	548 PMXS/MXDRAC	June 2009
ClnSpray-1	4697	PAINT GUN WASHER	3001	K-77	548 PMXS/MXDRAC	June 2009
ClnSpray-1	5057	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ClnSpray-1	5058	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ClnSpray-1	5059	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ClnSpray-1	5060	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ClnSpray-1	5061	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ClnSpray-1	5062	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	August 2009
ClnSpray-1	5141	ENCLOSED PAINT GUN CLEANER	2211	E-6	551 CMMXS/MXDPBB	June 2009
ClnSpray-1	5142	ENCLOSED PAINT GUN CLEANER	2211	E-6	551 CMMXS/MXDPBB	June 2009
ClnSpray-1	5143	ENCLOSED PAINT GUN CLEANER WITH SOLVENT RECYCLER	2211	E-6	551 CMMXS/MXDPBB	June 2009
ClnSpray-1	5272	PAINT GUN CLEANING	2211	BETWEEN SPRAY BOOTHS 1 & 2	551 CMMXS/MXDPBB	~1993
ClnSpray-1	5277	PAINT GUN CLEANING	3708	141	550 CMMXS/MXDPBC	1997
ClnSpray-1	5292	ENCLOSED PAINT GUN CLEANER	2101	INSIDE EAST PAINT BOOTH	551 CMMXS/MXDPBB	MAY 2003
ClnSpray-1	5293	ENCLOSED PAINT GUN CLEANER	2101	E-15	551 CMMXS/MXDPBB	June 2009
ClnSpray-1	5294	ENCLOSED PAINT GUN CLEANER	2101	E-15	551 CMMXS/MXDPBB	June 2009
ClnSpray-1	5554	PAINT GUN CLEANING	200	Room 141	550 CMXS/MXDPAA	2009
ClnSpray-1	5599	ENCLOSED PAINT GUN CLEANER - IDLE	3705	BAY E, COLUMN 33 1/2	551 CMMXS/MXDPAC	ECD SPRING 2007
ClnSpray-1	5601	ENCLOSED PAINT GUN CLEANER	2101	INSIDE WEST PAINT BOOTH	551 CMMXS/MXDPBB	FEB 07
ClnSpray-1	5605	ENCLOSED PAINT GUN CLEANER	2210	CSD SHOP	552 CMMXS/MXDPAC	FEB 07
ClnSpray-1	5606	ENCLOSED PAINT GUN CLEANER	2210	CSD SHOP	552 CMMXS/MXDPAC	FEB 07
ClnSpray-1	5607	ENCLOSED PAINT GUN CLEANER	2210	CSD SHOP	552 CMMXS/MXDPAC	FEB 07
ClnSpray-1	5608	ENCLOSED PAINT GUN CLEANER	2101	E-15	551 CMMXS/MXDPBB	MAR 07

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ClnSpray-1	5611	ENCLOSED PAINT GUN CLEANER	3001	R-53, WEST SIDE OF PAINT BOOTH	552 CMMXS/MXDRAD	~1993
ClnSpray-1	5614	ENCLOSED PAINT GUN CLEANER	3705	Bay B	552 CMMXS/MXDRAD	AUG 06
ClnSpray-1	5645	ENCLOSED PAINT GUN CLEANER	3001	R-53	552 CMMXS/MXDRAD	AUG 2007
ClnSpray-1	5646	PAINT GUN CLEANING CABINET	3707	RM102	550 CMMXS/MXDPBA	AUG 07
ClnSpray-1	5671	PAINT GUN CLEANING	2211	North Side of Paint Booths	551 CMMXS/MXDPBB	
ClnSpray-1	5672	PAINT GUN CLEANING	2211	West Booth, #2	551 CMMXS/MXDPBB	
ClnSpray-1	5673	ENCLOSED PAINT GUN CLEANING CABINET	3001	Ka-51.1	552 CMMXS/MXDRAD	AUG 08
EngTest-1	4403	JET ENGINE TEST CELLS, EIGHT	3703		MXPATAA	APR 1975
EngTest-1	4404	JET ENGINE TEST CELLS, FOUR	3234	TEST CELLS # 9-12	MAE-MXPAT	NOV 1956
Fuel-1	8805	OFFLOADING HEADER(S) AND FILLSTAND(S), MOGAS	290		72MSG/LRDF	NOV 1986
Incin-1	1060	CLASSIFIED WASTE INCINERATOR	1096		72 CS [OK LEAGUE FOR THE BLIND	1986
NCDpnt-1	2414	AQUAMISER DEPAINTING OF PARTS AND STABILIZERS	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	FALL 1996
NCDpnt-1	2440	AIRCRAFT DEPAINTING, MEDIA BLASTING	3228	DOCK,ASF	MBCCA	JUN 02
NCDpnt-1	5050	AIRCRAFT PARTS DEPAINTING, MEDIA BLASTING	9001	P40	551 CMMXS/MTBDG (?)	August 2009
NCDpnt-1	5051	AIRCRAFT PARTS DEPAINTING, MEDIA BLASTING	9001	P40	551 CMMXS/MTBDG (?)	August 2009
Solvent-1	2616	COLD CLEANING (NON-AEROSPACE)	3105	TRAILER SHOP, NORTH DOCK	76 AMXG/QPQ	SEP 07
Solvent-1	3064	COLD CLEANING TANK, FOR AGE PARTS	220		552 MXS/MXMGS	APR 2005
Solvent-1	3065	COLD CLEANING TANK, FOR AGE PARTS	985		552 MXS/MXMGS	APR 2005
Solvent-1	3702	COLD CLEANING TANK, CIRCUIT BOARD DEVELOPMENT	1017	ENGINEERING	327TH CLSG/GFLN	APR 1994
Solvent-1	3707	COLD CLEANING TANKS, TWO, FIREARMS	1023	FIRING RANGE	72SFS/SFTC	1982
Solvent-1	3738	COLD CLEANING TANK, MOTOR VEHICLE PARTS	2110	in western portion of building	72 ABW/LGTV	Prior to 1998
Solvent-1	3780	COLD CLEANING TANK, 15 GAL	5935	GOLF COURSE MAINTENANCE	72 MSG/SVVG	Prior to 1998
Solvent-1	3787	COLD CLEANING TANK	1	CENTER OF WEST LEG	72MSSDPT	Prior to 1985
Solvent-1	3805	COLD CLEANING TANK, 30 GAL, FACILITY MAINT	1115	LIQUID FUELS MAINTENANCE	72 ABW/COU	JAN 1998
Solvent-1	3811	COLD CLEANING TANK, 20 GAL	773	ROADS & GROUNDS	72 ABW/CEC	1990
Solvent-1	3833	COLD CLEANING TANK, 20 GAL, GSE	2101	B-4, D-3	MAB-BARDES	Prior to 1998
Solvent-1	3838	COLD CLEANING TANK, NON-	210	COMPRESSOR ROOM	76 MXSS/MXDVABA	PRIOR TO



APPENDIX B						
SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
		AEROSPACE				1998
Solvent-1	3843	COLD CLEANING TANK, 20 GAL., GSE	2101	B-4, D-3	MAB-BARDES	Prior to 1998
Solvent-1	3845	SOLVENT CLEANING TANK	3220	ROOM 109, HYDRAULIC ROOM, ENGINEERING TEST LAB	76 MXSS/MXDEB	1998
Solvent-1	3851	COLD CLEANING TANK , AUTO PARTS	1130	General Purpose (south) maint. Area, middle of west wall	72 ABW/LGTV	2008
Solvent-1	3852	COLD CLEANING TANK, AUTO PARTS	1130	Special Purpose (north) maint. area, on northwest wall	72 ABW/LGTV	2008
Solvent-1	5265	CLEAN ROOM TANK 13: CURRENTLY EMPTY, IDLE	3001	BEARING SHOP	MANMCA	Prior to 1998
Solvent-2	2036	GENERAL SOLVENT USE, PAINT GUN TESTING	2280	NEW PAINT FACILITY	MXACCB	2002
Solvent-2	2155	GENERAL SOLVENT USE, PAINT GUN TESTING	3225	GUN AND POT MAINT ROOM	MXACCB	PRE 1994
SrfCoat-1	2000	PAINT BOOTH, DRY FILTER	2121	EAST SIDE OF BLDG, CENTER	MXACCB	PRE 1994
SrfCoat-1	2030	SURFACE COATING, PRIMER AND TOPCOAT	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	PRE 1994
SrfCoat-1	2119	SURFACE COAT (Topcoat/Primer, Dry Filter system)	2136	E-3 MAINTENANCE HANGAR AREA AND BACK SHOP	MXACE	PRE 2009
SrfCoat-1	2151	SURFACE COATING, PRIMER AND TOPCOAT	3225	NEW PAINT FACILITY, RM 121	MXACCB	MAR 99
SrfCoat-1	2400	SURFACE COATING, PRIMER AND TOPCOAT	2122	SOUTH BAY, EAST DOCK	MXACCA	JUL 98
SrfCoat-1	2543	PAINT BOOTH, DRY FILTER	2122	SOUTH BAY, EAST DOCK, SW CORNER	MXACCA	OCT 2003
SrfCoat-1	2546	PAINT BOOTHS, DRY FILTER	3705	SW CORNER	76AMXG\MXAATB	JUN 2005
SrfCoat-1	3040	PAINT BOOTH, DRY FILTER, TOUCH UP	289	PAINT BOOTH	EMS/MXMFS	March 1998
SrfCoat-1	3042	PAINT BOOTH, DRY FILTER, TOUCH UP	976	AWACS ALERT BOOTH	CMS/MXMCF	1992
SrfCoat-1	3473	PAINT BOOTH, THREE STAGE FILTER	1068	SW CORNER OF BLDG, ROOM 102 AND 104	507 MXS/LGMFC	1998
SrfCoat-1	4126	PAINT BOOTH, DRY FILTER	3001	K-78	MXPCCB	MAR 1971
SrfCoat-1	4576	PAINT BOOTH, DRY FILTER	3001	X-55	545 PMXS/MXDPAB	JULY 04
SrfCoat-1	4587	PAINT BOOTH, DRY FILTER, SPECIALTY COATINGS	3001	Y-78	544 PMXS/MXDPAA	JAN 2007
SrfCoat-1	4589	PAINT BOOTH, DRY FILTER	3001	X-80	544 PMXS/MXDPAA	
SrfCoat-1	4601	PAINT BOOTH, DRY FILTER	801		547 PMXS/MXDTABC	OCT 06
SrfCoat-1	4603	PAINT BOOTH, DRY FILTER, SPECIALTY COATINGS	3001	X-88	544 PMXS/MXDPAA	OCT 06
SrfCoat-1	4657	PAINT BOOTH	3001	S-85	544 PMXS/MXDPAB	JAN 08
SrfCoat-1	4659	PAINT BOOTH	3001	U-83	544 PMXS/MXDPAB	JAN 08

APPENDIX B						
SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
SrfCoat-1	4661	PAINT BOOTH	3001	U-106	544 PMXS/MXDPAB	JAN 08
SrfCoat-1	5003	PAINT BOOTH, DRY FILTER	200	T-4	550 CMXS/MXDPAA	FUTURE (2003)
SrfCoat-1	5016	PAINT BOOTH, DRY FILTER	2211	E-7	MXCYDC	JULY 1994
SrfCoat-1	5040	PAINT BOOTH, DRY FILTER	3001	KC-51.1	552 CMMXS/MXDRAD	1987
SrfCoat-1	5054	PAINT BOOTH, DRY FILTER	9001	P42	551 CMMXS/MTBDG (?)	Aug 2009
SrfCoat-1	5055	PAINT BOOTH, DRY FILTER	9001	P42	551 CMMXS/MTBDG (?)	Aug 2009
SrfCoat-1	5056	PAINT BOOTH, DRY FILTER	9001	P42	551 CMMXS/MTBDG (?)	Aug 2009
SrfCoat-1	5079	PAINT BOOTH, DRY FILTER	3001	S-53	552CMXS/MXDRAD	DEC 1983
SrfCoat-1	5080	PAINT BOOTH, SHEET METAL	3001	S-53	552 CMXS/MXDRA	SEP 08
SrfCoat-1	5137	PAINT BOOTH, DRY FILTER	2211	D-7	MXCYDC	JULY 1994
SrfCoat-1	5290	PAINT BOOTH, DRY FILTER	2101		MXCYBA/B/C	2001
SrfCoat-1	5331	PAINT BOOTH, DRY FILTER	2210		MNMCC	SEP 04
SrfCoat-1	5332	PAINT BOOTH, DRY FILTER	2210		MNMCC	SEP 04
SrfCoat-1	5333	PAINT BOOTH, DRY FILTER	2210		MNMCC	SEP 04
SrfCoat-1	5598	PAINT BOOTH, DRY FILTER - IDLE	3705	BAY E, COLUMN 33 1/2	551 CMMXS/MXDPAAC	ECD SPRING 2007
SrfCoat-1	5613	PAINT BOOTH, DRY FILTER	3705	Post A-18	552 CMMXS/MXDRAD	AUG 06
SrfCoat-2	2101	SPOT PRIMER APPLICATION, BRUSH	2121	NORTH AND SOUTH DOCKS	MXABF	PRE 1994
SrfCoat-2	2113	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2122	B-1 MAINTENANCE/EGRESS	MXABB	PRE 1994
SrfCoat-2	2122	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2136	E-3 MAINTENANCE HANGAR AREA AND BACK SHOP	MXACE	PRE 1994
SrfCoat-2	2129	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	240	BOTH DOCKS	MABATB	PRE 1994
SrfCoat-2	2141	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	3102	KC-135 POST DOCK, NORTH	MABAT	PRE 1994
SrfCoat-2	2228	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2122	SOUTH BAY, EAST DOCK	MXACCA	FUTURE
SrfCoat-2	2234	SPOT PRIMER AND TOPCOAT APPLIC, TOUCH UP	3105	ONE DOCK	MABAT	PRE 1994
SrfCoat-2	2249	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2122	SOUTH BAY, CENTER & WEST DOCK	MXACCA	FUTURE
SrfCoat-2	2423	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	3001	Y-18, SOUTH MOVING LINE	72AMXG	PRE 1994
SrfCoat-2	2433	SURFACE COATING, BRUSH	289	HANGAR	EMS/MXMFS	MAY 00

APPENDIX B						
SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG				(Data current as of 17 September 2009)		
SrfCoat-2	2434	SURFACE COATING, PRIMER AND TOPCOAT	230	BOTH DOCKS	CMS/MXMVA	JUN 00
SrfCoat-2	2530	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	FLIGHTLINE		MAB	
SrfCoat-2	2625	AEROSPACE COATING, BRUSH OR TOUCH UP	3228	HANGAR	566 AMXS/MXDVAA	AUG 08
SrfCoat-2	2626	Surface Coating Operations, Brush Application	3705	SW CORNER (Bay E)	76AMXG/MXAATB	2008
SrfCoat-2	3010	SPOT PRIMER AND TOPCOAT APPLICATION, TOUCH UP	976	AWACS ALERT HANGAR	CMS/MXMCf	1992
SrfCoat-2	3014	SURFACE COATING, BRUSH PAINTING	267	AAR CONTRACT OPERATIONS	AAR CONTRACT OPERATIONS	
SrfCoat-2	3015	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	260		OLTK [ACC CONTRACT]	Prior to 1998
SrfCoat-2	3041	SURFACE COATING/DEPAINTING, TOUCH UP AND REPAIR	289	HANGAR	EMS/MXMFS	1981
SrfCoat-2	3061	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	230	ALL DOCKS	EMS/MXMFS	
SrfCoat-2	3300	SURFACE COATING OPERATIONS, HANGAR	820	HANGAR	CSCW1/N415	1993
SrfCoat-2	3848	SURFACE COATING, TOUCH UP	1030	HANGAR	507 MOF/MXOOL	AUG 08
SrfCoat-2	4585	SURFACE COATING OPERATIONS, BRUSH APPLICATION	3001	X97-X101	MAEAN	JAN 2005
SrfCoat-2	5009	SURFACE COATING OPERATIONS, BRUSH APPLICATION	2101		MXCYBA/B/C	Prior to 1998
SrfCoat-2	5025	SURFACE COATING - TOUCH-UP (PEN OR BRUSH)	200	Rm 126	550 CMXS/MXDPAA	Jan 2009
SrfCoat-2	5026	SURFACE COATING - TOUCH-UP (PEN OR BRUSH)	3001	W-45	552 CMXS/MXDPBA	Mar 2009
SrfCoat-2	5041	SPOT PRIMER APPLICATION, BRUSH	3001	KC-50	552 CMMXS/MXDRAD	FEB 2009
SrfCoat-2	5190	SPOT PRIMER APPLICATION, BRUSH	3001	R-43	552 CMXS/MXDPBB	FEB 2009
SrfCoat-2	5222	SURFACE COATING, SPOT PRIMING, BRUSH	3705	E-32	551 CMMXS/MXDPBB	Prior to 1998
SrfCoat-2	5266	SURFACE COATING, BRUSH PAINTING	214		MXCVAFH	Prior to 1998
SrfCoat-2	5267	SURFACE COATING, TOUCH UP, BRUSH	3001	V-65	552CMXS/MXDRAD	Prior to 1998
SrfCoat-2	5286	SURFACE COATING, BRUSH PAINTING	3705		MXCYDB	Prior to 1998
SrfCoat-2	5313	SURFACE COATING OPERATIONS, TOUCH-UP, BRUSH	2121	SECOND FLOOR, NORTH DOCK, WEST END, MIDDLE THIRD	MXCYD/A	Prior to 1998
SrfCoat-2	5315	SPOT PRIMER APPLICATION, BRUSH	2211	THROUGHOUT BLDG	MXCYDC	JUN 00
SrfCoat-2	5594	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	3001	0-67	MNMMD	AUG 06
SrfCoat-2	5596	SURFACE COATING, BRUSH OR SPRAY	3001	M-65	MNMMD	Prior to 1998

APPENDIX B						
SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG			(Data current as of 17 September 2009)			
		TOUCH UP				
SrfCoat-3	4017	PAINT BOOTH, DRY FILTER, CERAL 3450	3001	K-77	548 PMXS/MXDRAC	2009
SrfCoat-3	4018	PAINT BOOTH, DRY FILTER, SERMETEL	3001	K-77	MXPCCB	1984
SrfCoat-3	4070	PAINT BOOTH, DRY FILTER, SOLID FILM LUBRICANTS	3221	C-4	547 PMXS/MXDRBBE	DEC 1988
SrfCoat-3	4074	PAINT BOOTH, DRY FILTER: SERMETEL	3221	B-4, SW CORNER	547 PMXS/MXDRBBE	DEC 1988
SrfCoat-3	4595	PAINT BOOTH, DRY FILTER, CERAL 3450	3221	C-4	547 PMXS/MXDRBBE	2009
SrfCoat-3	5168	PAINT BOOTH, DRY FILTER	3707	RM 102	MXCVF	Prior to 1998
SrfCoat-3	5172	PAINT BOOTH, DRY FILTER	3708	141	MANAF	JUN 1993
SrfCoat-4	2162	PAINT BOOTH, DRY FILTER, FOR GSE	2101	A-5/6	MAB-BARDES	PRE 1994
SrfCoat-4	3303	PAINT BOOTH, FOR GSE AND FACILITY EQUIPMENT	825	NAVY/L-3 CONTRACTOR	CSCW1/N415	MAR 1992
SrfCoat-4	3501	PAINT BOOTH, DRY FILTER	2101	WEST SIDE	76 MSXG	1953
SrfCoat-4	3736	PAINT BOOTH, MAINTENANCE OF FLEET VEHICLES/GSE	1130	EAST SIDE	72 ABW/LGTV	Prior to 1998
Tank-1	8333	AST #333, 42000 GAL, UNLEADED MOGAS	333	290 FUEL YARD-POL FUEL YARD	72MSG/LRDF	1989
Tank-2	8105	AST, ROADS AND GROUNDS, 3000 GAL: MOGAS	885	WEST OF BLDG 773	72MSG/LRDF	1995
Tank-2	8114	AST #1008, 5000 GAL: MOGAS	1010	E OF BLDG 1010	3 CCSS/CYSD	1995
Tank-2	8115	AST #1060, 5000 GAL: MOGAS	1058		507 MS/LGMG	1995
Tank-2	8415	AST, 1000 GAL: MOGAS	820	NORTH EAST CORNER	CSCW1/N415	2000
Tank-2	8418	AST dual compartment	1137	Bldg 1137	Trace Contractor	2005
Tank-2	8702	AST, 3000 GAL: MOGAS	2101	NORTH CENTRAL SIDE OF BUILDING--OUTSIDE	72 AMXG	1995
VaporDeg-1	4050	VAPOR DEGREASER: PERCHLOROETHYLENE	3001	M-61, AREA 1	MXPCCAH	1986
VaporDeg-2	4202	VACUUM VAPOR DEGREASER: PERCHLOROETHYLENE - IDLE	3001	M-61, AREA 1	MXPCCAH	MAY 1998

APPENDIX C			
AGGREGATED INSIGNIFICANT SOURCES BY CATEGORY (Data current as of 17 September 2009)			
EU_ID	DESCRIPTION	TITLE_V_DESC	COMMENT
0500	NATURAL GAS-BURNING BOILERS, SPACE HEATERS, FURNACES, EXPANSOR TORCHES, FOUNDRY/PROCESS OVENS, RANGES/DEEP FAT FRYERS, < OR = 5 MMBtu HEAT INPUT, 244 TOTAL BASEWIDE	BOILERS, HEATERS, ET AL; < = 5 MMBtu HEAT INPUT	INCLUDES EXPANSOR TORCHES USED ONLY TO HEAT METAL PARTS (~ 0.001 MMBtu), AND RANGES AND DEEP FAT FRYERS, < OR = 5 MMBtu HEAT INPUT, USED FOR COMMERCIAL FOOD PREPARATION AT BASE RESTAURANTS AND SNACK BARS (APPROX 65); ~ 270 TOTAL
0502	STORAGE TANKS, < 400 GAL CAPACITY	STORAGE TANKS, < 400 GAL CAPACITY	ODEQ EMAIL STATES "THOSE [TANKS] WITH A STORAGE CAPACITY LESS THAN 400 GALLONS CAN BE CONSIDERED INSIGNIFICANT DUE TO THE INFREQUENT USE AND TEMPORARY STORAGE..." "...MERELY MENTIONING THESE AND NOT CALCULATING EMISSIONS WOULD SUFFICE."; ~ 25 TOTAL
0503	GENERAL ADHESIVE/SEALANT USE	GENERAL ADHESIVE/SEALANT USE	INSIGNIFICANT EMISSION UNITS AGGREGATED; ~ 110 TOTAL
0504	GRINDING AND SANDING OPERATIONS FOR AIRCRAFT REWORK, BASEWIDE	GRINDING AND SANDING OPERATIONS	~ 80 TOTAL
0505	WELDING OPERATIONS FOR AIRCRAFT REWORK, BASEWIDE	WELDING OPERATIONS	~ 20 TOTAL
0506	SOLDERING OPERATIONS FOR AIRCRAFT REWORK, BASEWIDE	SOLDERING OPERATIONS	~ 35 TOTAL
0507	HAZARDOUS MATERIAL/ HAZARDOUS WASTE TEMPORARY STORAGE SITES, HAZ WASTE ACCUMULATION POINTS	HAZARDOUS MATERIAL/ WASTE TEMPORARY STORAGE SITES	~ 750 TOTAL, 400 HAZ MAT STORAGE POINTS/ 334 HAZ WASTE ACCUMULATION POINTS

APPENDIX C			
AGGREGATED INSIGNIFICANT SOURCES BY CATEGORY (Data current as of 17 September 2009)			
EU_ID	DESCRIPTION	TITLE_V_DESC	COMMENT
0508	STORAGE TANKS, 500-15,000 GALLON CAPACITY, INSIGNIFICANT, USED TO TEMPORARILY STORE HAZARDOUS WASTE/SPENT HAZARDOUS MATERIAL/FUEL PRIOR TO OFFSITE DISPOSAL	STORAGE TANKS, 500-15,000 GALLON CAPACITY	~ 15 TOTAL; ODEQ EMAIL STATES "RECOMMEND YOU LIST THESE TANKS (NOT INDIVIDUALLY...BUT AS A NUMBER WITH A CERTAIN SIZE RANGE...)...THE ONLY RECORDKEEPING...WOULD BE ANNUAL THROUGHPUT BASED ON ...ACCOUNTING RECORDS OF USPCI REMOVAL."
0509	CURING OF RESINS	CURING OF RESINS	~ 20 TOTAL
0510	FUGITIVE FUEL EMISSIONS: DEFUEL OPERATION	FUGITIVE FUEL EMISSIONS: DEFUEL OPERATION	RAMP OPERATIONS; MATERIAL USE: JP-5 is used to purge JP-8 from aircraft on ramp.; TYP USAGE RATE:102 aircraft/year, typical capacity based on current aircraft PDM packages. 1997: 100 aircraft. Aircraft to arrive on station with no more than 10,000 lb f
0511	FUEL DISPENSING OPERATIONS	FUEL DISPENSING OPERATIONS	~ 20 TOTAL
0512	STORAGE TANKS ASSOCIATED WITH EMERGENCY GENERATORS, INSIGNIFICANT	STORAGE TANKS	~ 90 TOTAL
0513	STORAGE TANKS, INSIGNIFICANT [NOTE THAT MOST STORAGE TANKS HAVE BEEN PREVIOUSLY JUSTIFIED AS INSIGNIFICANT IN 1997 AEI TURNAROUND DOCUMENTS SUBMITTED MAR 98]	STORAGE TANKS	~ 40 TOTAL
0515	EMERGENCY GENERATORS, INSIGNIFICANT	EMERGENCY GENERATORS	~ 90 TOTAL
0516	WOODWORKING	WOODWORKING	BLDG 1156
0517	SOLVENT USE FROM CONTAINERS <1 LITER	SOLVENT USE FROM CONTAINERS <1 LITER	~ 5 TOTAL
0518	GENERAL SOLVENT USE, NOT SUBJECT TO NESHAPS (NON-AEROSPACE)	GENERAL SOLVENT USE	~ 10 TOTAL
0519	ELECTROPLATING OPERATIONS, NOT SUBJECT TO NESHAPS	ELECTROPLATING OPERATIONS	~ 5 TOTAL
0520	SPECIALTY COATING USAGE, EXEMPT FROM AEROSPACE NESHAP	SPECIALTY COATING USAGE	~ 25 TOTAL

APPENDIX C			
AGGREGATED INSIGNIFICANT SOURCES BY CATEGORY (Data current as of 17 September 2009)			
EU_ID	DESCRIPTION	TITLE_V_DESC	COMMENT
0521	STRIPPER USAGE, NON-HAP CONTAINING, NOT SUBJECT TO AEROSPACE NESHAP	STRIPPER USAGE, NON-HAP CONTAINING	BLDG 2280 -- JAN06 UPDATE
0523	CPC (CORROSION PREVENTIVE COMPOUND) APPLICATION [SPECIALTY COATINGS]	CPC (CORROSION PREVENTIVE COMPOUND) APPLICATION	"group" EU to capture aggregate CPC usage

APPENDIX D					
NON-AGGREGATED INDIVIDUAL INSIGNIFICANT SOURCES			(Data current as of 17 September 2009)		
EU_ID	DESCRIPTION	BLDG	LOCATION	SHOP	ORGANIZATION
3750	BARREL CLEANING, HIGH PRESSURE WATER WASHING AND AEROSOL CAN PIERCING/CRUSHING OPERATION-TI-22, COLLECTS COOLANTS	3125		BARREL YARD	MAD/MAE
3834	WASHING OF AGE IN CAR WASH BAY	2101	A-1	GSE MAINTENANCE	MABPQ-BARDES
3840	PARTS WASHING TANK, 200 GAL, FOR CLEANING AIRCRAFT WHEELS [FLUSH CLEANING] - IDLE	1041	NW CORNER	HYDRAULIC SHOP	507MXS/HYDR
4053	ORGANOSOL DIP TANKS, TWO (2), LOCATED AT NORTHEAST END OF ELECTROLESS NICKEL LINE, T340 AND T342	3001	M-61, AREA 3,	ELECTROPLATING	MXPCCA
4075	THERMAL SPRAY OPERATIONS--PLASMA ROBOTS	3221	K-1	BLADE REPAIR - Plasma Spray	547 PMXS/MXDRBB
4408	THERMAL SPRAY OPERATIONS	3001	I-73	PLASMA SPRAY/HEAT TREAT	MXPCCBJ
4409	THERMAL SPRAY OPERATIONS, PLASMA SPRAY UNITS WITH TORIT DUST COLLECTORS	3001	NW ANNEX	THERMAL COATING	PRATT & WHITNEY
4611	HEATED ALKALINE CLEANING TANK	3001	T-W 80-83	F100 BEARING SHOP	544 PMXS/MEKBC
4620	GENERAL ADHESIVE USE THROUGHOUT THE SHOP	3001	X-Y 70-75	F100 CORE SUB-ASSEMBLY	76 PMXG/544 PMXS/MDPAC
4629	SAND BLASTING UNIT	9001	DD-39	TF33 QEC Repair	545 PMXS/MXDPAB
4682	blast cabinet	9001	DD-40	TF-33 QEC Repair	545 PMXS/MXDPAB
5022	ALODINE APPLICATION	3001G	R-43	Electronic Flight Controls	550 CMXS/MXDPBB
5116	SURFACE COATING OPERATIONS, AEROSOL AND BRUSH TOUCH UP IN WOODWORKING SHOP--USED THROUGHOUT THE SHOP.	2101	E-G-5	GSE MAINTENANCE	MABPQ-BARDES
5119	COOLANT/CUTTING FLUID USE FOR MACHINING OPERATIONS	2121	FIRST AND SECOND FLOORS	TOOL AND DIE, FABRICATION	MXCYD/A
5166	STRIPPING BOOTH, CURRENTLY IDLE--RELOCATED TO BUILDING 200 FROM 3707	200	ELECTRONIC REPAIR	B-1 AVIONICS	MXCVF
5173	PAINT STRIPPING SINK, LOCAL EXHAUST---- CURRENTLY IDLE SINCE 1997.	3708	143	B-2 AVIONICS AND TEST	MXCVF
5226	SURFACE COATING OPERATIONS THROUGHOUT THE SHOP, TOUCH UP, AEROSOL [SPECIALTY COATINGS]	3507	RADOME TEST	RADAR TEST	MXCVFE
5400	FOUNDRY, NATURAL GAS BURNING KILNS	3001	S-33	SHEETMETAL	552CMXS/MXDRAD
5561	TEST STANDS, FOUR	200	PNEUMATIC TEST AREA	AIR ACCESSORIES	550 CMMXS/MXDPAA
5562	COLD CLEANING TANK [FLUSH CLEANING]	200	NORTH SECTION OF BLDG: NDI	AIR ACCESSORIES	550 CMMXS/MXDPAA



**APPENDIX D**
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			ROOM		
5658	BLASTING OPERATIONS	3705	G-32 (Bay E)	Boom Shop	551 CMMXS/MXDPAC
5659	BLASTING OPERATIONS	3705	G-31 (Bay E)	Boom Shop	551 CMMXS/MXDPAC
5662	CREST ULTRASONIC CLEANING TANK	3705	A-17	TUBE AND CABLE	552 CMXS/MXDRAD
5663	FURNACE	3705	A-17	TUBE AND CABLE	552CMXS/MXDRAD
5668	CLEANING TANK, OPEN TOP, FOR CLEANING TUBES: ALKALINE CLEANER	3705	A-19 ("Bay C")	TUBE AND CABLE	552 CMMXS/MXDRAD
5674	enclosed tank (300-gal capacity) - PD680 for leak/pressure checking of booms	3705	D30 (Bay "E")	Boom Shop	551 CMMXS/MXDPAC
5676	enclosed tank - PD680 for leak/pressure checking of booms	3705	G-32 (Bay "E")	Boom Shop	551 CMMXS/MXDPAC
6000	INSIGNIFICANT COMBUSTION SOURCES	BASEWIDE	BASEWIDE	VARIOUS	72 ABW/CE
6100	INSIGNIFICANT LARGE GENERATORS	BASEWIDE	BASEWIDE	VARIOUS	72 ABW/CE
6200	INSIGNIFICANT SMALL GENERATORS	BASEWIDE	BASEWIDE	VARIOUS	72 ABW/CE
7013	ENGINES FOR FIRE PUMPS, FOUR (4): DIESEL	2123	BOILER #2	CEC WATER & WASTE	72 ABW/CEC
7024	FIRE PUMP ENGINE: DIESEL	810			72 ABW/CEC
7220	FIRE PUMP ENGINE: DIESEL	1083			72 ABW/CEC
7236	FIRE PUMP ENGINE: DIESEL	9303			72 ABW/CEC
7400	ENGINES FOR FIRE PUMP, TWO (2) : DIESEL	241	FIRE SUPPRESSION	CEC WATER & WASTE	72 ABW/CEC
7401	FIRE PUMP ENGINE: DIESEL	469	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
7403	FIRE PUMP ENGINES, THREE (3): DIESEL	1032	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
7404	FIRE PUMP ENGINES, TWO (2): DIESEL	2119	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
7406	FIRE PUMP ENGINE: DIESEL	3202	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
7412	FIRE PUMP ENGINE: DIESEL	1020	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
7415	DIESEL ENGINE FOR FIRE PUMP	1032		CEC WATER & WASTE	72 ABW/CEC
7425	GENERATOR FOR FIRE PUMP: DIESEL	11	SW OF BLDG 11	CEC WATER & WASTE	72 ABW/CEC
7908	AST (vaulted UST) #4006, 1000 GAL, FOR FIRE SUPPRESSION PUMP ENGINE: MOGAS	4006	EAST OF WATER WELL	CEC WATER & WASTE	72 ABW/CEC
8118	UST #264R, 15000 GAL, FOR AGE EQUIPMENT SUPPORT: JP-8	289	WEST OF OF BLDG 289	BASE FUELS	72 ABW/LGSF
8126	AST #332, 42000 GAL, CONE ROOF WITH FLOATING PAN: DIESEL (DL-2)	332	290 FUEL YARD - POL FUEL YARD	BASE FUELS	72MSG/LRDF

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8207	UST #1009, 5000 GAL: DIESEL	1010	E OF BLDG 1010	3RD HERD	33 CCSS/CYSD
8243	UST, 20000 GAL, SUPPORT FOR BLDG 3001 BOILERS: DIESEL FUEL	3001	NE OF BLDG 3001G	CEC	72 ABW/CEC
8256	AST #998, 106472 GAL, MANIFOLDED WITH AST #965 AND #999, HYDRANT SYSTEM: JP-8	998	HYDRANT SYSTEM-AWACS ALERT FACILITY	BASE FUELS	72 ABW/LGSF
8257	AST #999, 106489 GAL, MANIFOLDED WITH AST #965 AND #998, HYDRANT SYSTEM: JP-8	999	HYDRANT SYSTEM-AWACS ALERT FACILITY	BASE FUELS	72MSG/LRDF
8258	AST #965, 107520 GAL, MANIFOLDED WITH AST #998 AND #999, HYDRANT SYSTEM: JP-8	965	NEAR AWACS ALERT FACILITY	BASE FUELS	72MSG/LRDF
8282	ASTs #3100, #3102, #3104, #3106; FOUR (4), 10000 GAL: CALIBRATION FLUID-- VAULTED	3108		FUEL COMPONENT TEST	MXCCCB
8285	ASTs, FIVE (5): CALIBRATION FLUID---- INCLUDES #CFT-1A, 10000 GAL; #CFT-1B, 10000 GAL; #RFT-1, 10000 GAL-RECOVERABLE; #NRFT-1A, 12000 GAL: NONRECOVERABLE; #NRFT-1B, 12000 GAL: NONRECOVERABLE	3902	E OF DOUGLAS BLVD	FUEL COMPONENT TEST	MANMCB
8286	UST, 10,000-GALLON JP-10 TANK	214	WEST OF BLDG 214	MISSILE TEST FACILITY	550 CMXS/MXDPAC
8287	UST, 10,000-GALLON JP-10 TANK	214	WEST OF BLDG 214	MISSILE TEST FACILITY	550 CMXS/MXDPAC
8289	UST, 10,000-GALLON, DUAL-COMPARTMENT PF-1 TANK	214	WEST OF BUILDING 214	MISSILE TEST FACILITY	550 CMXS/MXDPAC
8291	UST#821, 20000 GAL, SUPPLY FOR BOILERS: #2 FUEL OIL	821	SOUTH SIDE OF BLDG 821	NAVY	72 ABW/CEC
8330	AST #330, 210000 GAL, MANIFOLDED WITH AST #331: JP-8	330	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
8331	AST #331, 210000 GAL, MANIFOLDED WITH AST #330: JP-8	331	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
8334	AST #334, 42000 GAL, MANIFOLDED WITH AST #335: JP-5	334	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
8335	AST #335, 42000 GAL, MANIFOLDED WITH AST #334: JP-5	335	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
8337	AST #337, 47000 GAL: P-D-680	337	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
8341	AST #341, 42000 GAL: BIODIESEL	341	290 FUEL YARD-POL	BASE FUELS	72MSG/LRDF

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			FUEL YARD		
8401	AST #21090, 109000 GAL, JP-8--(MANIFOLDED) HYDRANT SYSTEM	1091		BASE FUELS	72MSG/LRDF
8402	AST #21091, 109000 GAL, JP-8--(MANIFOLDED) HYDRANT SYSTEM	1091		BASE FUELS	72MSG/LRDF

**MAJOR SOURCE AIR QUALITY PERMIT  
STANDARD CONDITIONS  
(July 21, 2009)**

**SECTION I. DUTY TO COMPLY**

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed. [40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

**SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS**

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F. [OAC 252:100-8-6(a)(3)(C)(iv)]

**SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING**

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

B. Records of required monitoring shall include:

- (1) the date, place and time of sampling or measurement;
- (2) the date or dates analyses were performed;
- (3) the company or entity which performed the analyses;
- (4) the analytical techniques or methods used;
- (5) the results of such analyses; and
- (6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report.

[OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions.

[OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act.

[OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards

(“NSPS”) under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants (“NESHAPs”) under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer’s instructions and in accordance with a protocol meeting the requirements of the “AQD Portable Analyzer Guidance” document or an equivalent method approved by Air Quality.

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM<sub>10</sub>). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

#### SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or

intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

## **SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM**

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification.

[OAC 252:100-8-6(c)(6)]

## **SECTION VI. PERMIT SHIELD**

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit.

[OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit.

[OAC 252:100-8-6(d)(2)]

## **SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT**

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be

based on the best available information accepted by AQD.

[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

## **SECTION VIII. TERM OF PERMIT**

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

## **SECTION IX. SEVERABILITY**

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[OAC 252:100-8-6 (a)(6)]

## **SECTION X. PROPERTY RIGHTS**

A. This permit does not convey any property rights of any sort, or any exclusive privilege.

[OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

## **SECTION XI. DUTY TO PROVIDE INFORMATION**

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.

[OAC 252:100-8-6(a)(7)(E)]



B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

## **SECTION XII. REOPENING, MODIFICATION & REVOCATION**

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances:

[OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

- (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
- (4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d).  
[OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a “grandfathered source,” as defined under AQD rules. Such changes may require a permit modification.

[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited.

[OAC 252:100-8-6(c)(6)]

**SECTION XIII. INSPECTION & ENTRY**

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(18) for confidential information submitted to or obtained by the DEQ under this section):

- (1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6(c)(2)]

**SECTION XIV. EMERGENCIES**

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.

[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance.

[OAC 252:100-8-6(a)(3)(C)(iii)(II)]

C. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

[OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that:

[OAC 252:100-8-6 (e)(2)]

- (1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
- (2) the permitted facility was at the time being properly operated;
- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F. [OAC 252:100-8-6(a)(3)(C)(iv)]

## **SECTION XV. RISK MANAGEMENT PLAN**

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

## **SECTION XVI. INSIGNIFICANT ACTIVITIES**

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

- (1) 5 tons per year of any one criteria pollutant.
- (2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.

[OAC 252:100-8-2 and OAC 252:100, Appendix I]

## **SECTION XVII. TRIVIAL ACTIVITIES**

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.

[OAC 252:100-8-2 and OAC 252:100, Appendix J]

## **SECTION XVIII. OPERATIONAL FLEXIBILITY**

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

- (1) result in no net emissions increases,

- (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
- (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

## **SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS**

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

- (1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter.  
[OAC 252:100-13]
- (2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU.  
[OAC 252:100-19]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for:  
[OAC 252:100-25]
  - (a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
  - (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
  - (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
  - (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards.  
[OAC 252:100-29]
- (5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur

dioxide.

[OAC 252:100-31]

- (6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- (7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

## SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR 82, Subpart A]

- (1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
- (2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
- (3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
- (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
- (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;
- (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
- (5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
- (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must

keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

## SECTION XXI. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

- (1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
- (2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
- (3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
- (4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R. § 70.8(a) and (c).
- (5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
- (6) The DEQ complies with 40 C.F.R. § 70.8(d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).
- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

**SECTION XXII. CREDIBLE EVIDENCE**

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[OAC 252:100-43-6]



# PART 70 PERMIT

AIR QUALITY DIVISION  
STATE OF OKLAHOMA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
707 N. ROBINSON, SUITE 4100  
P.O. BOX 1677  
OKLAHOMA CITY, OKLAHOMA 73101-1677

Permit No. 2009-394-C (M-3) PSD

Tinker Air Force Base

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having complied with the requirements of the law, is hereby granted permission to construct all the air emission sources within their boundaries in Midwest City, Oklahoma County, Oklahoma, subject to Specific Conditions and Standard Conditions dated July 21, 2009, both of which are attached.

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In the absence of construction commencement, this permit shall expire 18 months from the issuance date, except as authorized under Section VIII of the Standard Conditions.

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Division Director  
Air Quality Division

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Date



Tinker Air Force Base  
72 Air Base Wing (AFMC)  
Attn: Martin Wheeler  
7535 5<sup>th</sup> St, Building 400  
Tinker AFB, Oklahoma 73145

Permit Number: 2009-394-C (M-3) PSD  
Permit Writer: Ellis Fischer

SUBJECT: Facility: USAF Military Base, Air Force Material Command  
Modify Existing Processes  
Facility ID: 1518  
Location: Sec 24, T11N, R2W  
Oklahoma County, Oklahoma

Dear Mr. Wheeler:

Enclosed is the permit authorizing construction of the referenced facility. Please note that this permit is issued subject to standard and specific conditions that are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

As is customary with permit actions for federal installations in Oklahoma, permit fees are not collected until the permit is issued. Please consider this letter to be the invoice for the permit, with a fee of \$5,000 now due. Payment should go to Ms. Kerri Housley, Air Quality Division, 707 N. Robinson, Suite 4100, Oklahoma City, OK, 73102, and reference the permit number in the correspondence.

Also note that you are required to submit an emissions inventory for this facility. An emissions inventory must be completed on approved AQD forms and submitted (hardcopy or electronically) by April 1<sup>st</sup> of every year. Any questions concerning the form or submittal process should be referred to the Emissions Inventory Staff at 405-702-4100.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at (405) 702-4100 or email to [ellis.fischer@deq.ok.gov](mailto:ellis.fischer@deq.ok.gov).

Sincerely,

Phillip Fielder, P.E.  
Permits and Engineering Group Manager  
**AIR QUALITY DIVISION**